Vienna Instruments
Percussion

Mapping Documentation

Altar-boy bells	Finger cymbals	Ship's bell
Anklung	Flexatone	Shots
Bass drum	Glockenspiel	Sirens
Bell tree	Gong	Snare drum
Bicycle horns	Guiro	Snare drum ensemble
Boobam	Hammer	Spring drum
Brake disks	Handbells	Springs
Bullroarer	Japanese singing	Tambourine
Burma bells	bowls	Tam-tam
Car horns	Jingle bells	Temple blocks
Castanets	Jingle ring	Thundersheets
Caxixi	Lion roar	Timpani
Celesta	Lithophone	Triangle
Cencerros	Log drum	Tubular bells
Chimes	Ocean drum	Vibraphone
Church bells	Piatti	Vibratone
Claves	Piccolo drum	Waldteufel
Cowbells	Plate bells	Waterphone
Crotales	Railway rails	Whip
Cuica	Rainmaker	Wind machine
Cymbals	Ratchets	Woodblock
Field drum	Shakers	Xylophone

VIENNA SYMPHONIC LIBRARY

Contents

Introduction

This document contains the mapping list for the Percussion Collection of Vienna Instruments. You will find in it a comprehensive survey of the articulations/patches for the Standard and the Extended Libraries of each instrument, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset in the collection.

Patch information

The Patch information includes articulation types, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information.

Where the type of articulation requires a special mapping (which is often the case with percussion instruments), the mapping layout will be shown in a detailed graphic.

The velocity layer switches are roughly the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	0–88	89–127				
3	0–55	56–88	89–127			
4	0–55	51–88	89–108	109-127		
5	0–35	36–55	56–88	89–108	109–127	
6	0–35	36–55	56–88	89–108	109–118	119–127

Some of the percussion instruments have up to 12 velocity layers, and several have different numbers of velocities for different articulations in the same Patch; where this is the case, the Patch description gives more detailed information except for dynamics (crescendo and diminuendo, sforzato, …), which always have a set number of articulations according to their strength: light, 3 layers; medium, 2 layers; strong, 1 layer.

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

A/B switching normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo, etc. The percussion especially also uses other possibilities of A/B switching, like accelerando/ritardando, stroke direction, left and right hand alternation switches, release duration, and closed and open hits.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Speed controller switches naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here.

New instruments

The Vienna Instruments Percussion has an extended content compared with the Pro Edition Percussion. There are several instruments which were recorded especially for VI. Here's a brief overview:

Timpani - A	up to 8 velocities; single hits normal and secco, rolls, dynamic rolls, performance repetitions, 1–3 upbeats, single note and roll glissandi
Snare Drum - A	up to 12 velocities, snares on and off; single hits, rolls, dynamic rolls, performance repetitions, tied trills, rim hits
Field drum - A	up to 8 velocities, snares on and off; single hits, rolls, dynamic rolls, performance repetitions, rim hits
Bass drum - A	up to 8 velocities, soft and hard mallets; single hits, rolls, dynamic rolls, performance repetitions, 1–3 upbeats
Concert toms	up to 8 velocities; single hits, rolls, dynamic rolls, performance repetitions, 1–3 upbeats
Roto toms	up to 8 velocities; single hits, rolls, dynamic rolls, performance repetitions, rim hits
Taikos	up to 8 velocities; single hits, rolls, dynamic rolls, performance repetitions, rim hits, FX
Tambourine - A	up to 8 velocities; single hits, rolls, dynamic rolls, performance repetitions, 1–3 upbeats
Piatti - A	up to 8 velocities, single hits normal and slow, damped fast and slow, performance repetitions
Cymbal standard - A	up to 8 velocities, drumsticks and mallets; single hits normal and damped, rolls, dynamic rolls, performance repetitions
Triangle A	up to 8 velocities; single hits normal and damped, rolls, dynamic rolls, performance repetitions, 1–3 upbeats

Abbreviations

Instruments

Abbreviation	Meaning	Abbreviation	Meaning
B-Drum	bass drum	Spr-Drum	spring drum
Boo	boobam	ST-XY	stir xylophone
Co-Toms	concert toms	Tam	tam-tam
Cym	cymbal	Tamb	tambourine
Field	field drum	TBL	temple blocks
Glsp	glockenspiel	Tmp	timpani
J-Bowls	Japanese singing bowls	Tri	triangle
Ll-s	small lithophone	VIB	vibraphone
MAR	marimba	WBL	woodblocks
Perc	percussion	WP	waterphone
Ro-Toms	roto toms	Xyl	xylophone
Snare	snare drum		

Articulations, mallets, and other abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
1s, 2s, …	tone length 1 sec., 2 sec., …	MD	medium mallet
50, 60, …	50, 60 … centimeters diameter	me	medium (speed)
6Z, 8Z, …	6, 8 … inches diameter	ME	metal mallet
acc	accelerando	MHA	medium hard mallet
all	combination of all Patches of a category	mPL	medium plastic mallet
bME	large metal mallet	off	snare off
Chi	China (piatti)	on	snare on
CLU	cluster mallet	perf-rep	repetition performance
cre	crescendo	pizz	pizzicato
dim	diminuendo	PL	plastic mallet
do	down	Rod	metal rod
dyn	dynamics (crescendo and diminuendo)	Rubber	rubber mallet
		Rub-stick	rubbing stick
dyn9	dynamics, 9 repetitions	sl	slow
dyn-me	medium dynamics	SO	soft mallet
dyn-str	strong dynamics	SO+	very soft mallet
fa	fast	SO-med	medium soft mallet
FE	felt mallet	sPL	soft plastic mallet
FI	fingers	Stick	wood stick, drumsticks
FX	effect sounds	Tmp	timpani mallet
Gliss	glissando	Tri	triangle beater
Gliss_5-up	glissando, 4th upward	UB	upbeat
HA	hard mallet	UB-a1, -a2	1, 2 upbeats
HA-super	extra hard mallet	v1, v2 …	1st, 2nd, … variation
hPL	hard plastic mallet	Vib	with vibrato
Is	Istanbul Janissary or Symphonic (piatti)	WO	wood mallet
		XF	cell crossfade Matrix
K, K2	Avedis K1, K2 (piatti)	YA, yarn	yarn-wound mallet
lo	long	Za	Zildijan Avedis (piatti)

The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.
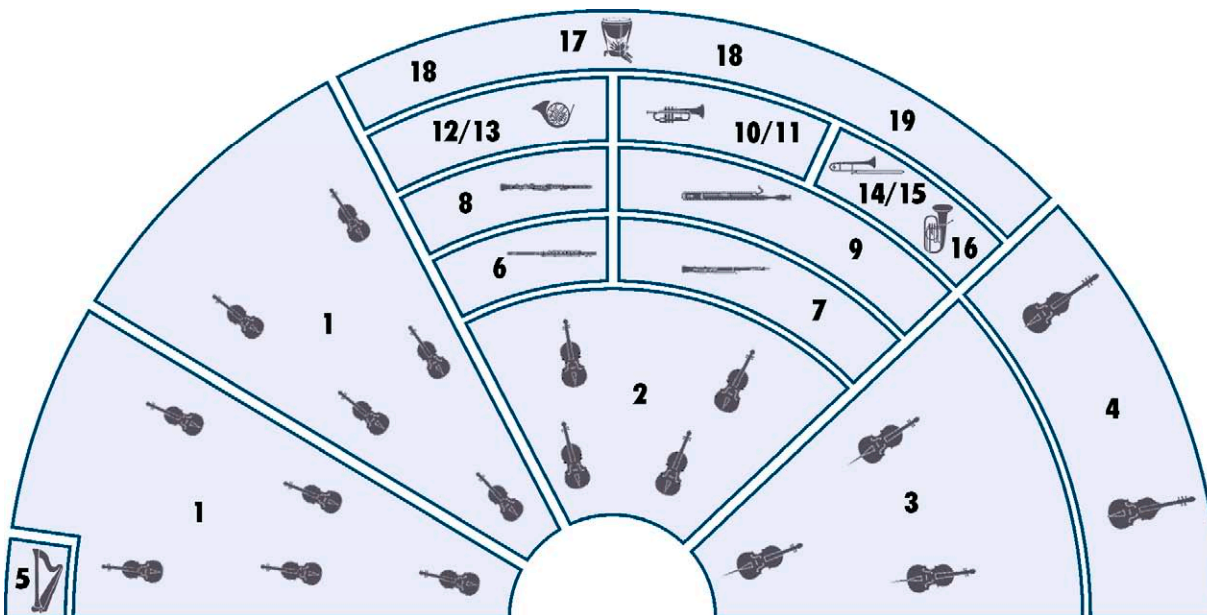
1	1st and 2nd violin	
2	Viola	
3	Cello	
4	Double bass	
5	Harp	
6	Concert flute, piccolo	
7	Oboe, English horn	
8	Clarinet, bass clarinet	

9	Bassoon, contrabassoon
10/11	Trumpet
12/13	Horn
14/15	Trombone
16	Tuba
17	Timpani
18	Drums, cymbals
19	other percussion instruments

Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

80 Processed Percussion

The processed percussions are a mixdown-ready set of selected samples from the Vienna Symphonic Library. Our goal was to achieve authentic acoustic depth and imaging from these instruments – as if they were recorded while being played in the back of the stage in a world-class orchestral hall, carefully treated by experienced engineers.

World class analog and digital equipment was used throughout: Dynamic processors from API, Manley, Urei, SPL and SSL, equalizers and filters from Massenburg, Avalon, Tube-Tec and Calrec, routed and mixed through the large-scale Neve VR console at Tonstudio Hafner near Vienna. The digital audio workstation which handled the complex routing was Steinberg's Nuendo 3, equipped with RME digital cards and Lake People AD/DA converters, Algorithmix equalizers and others, as well as additional custom designed software for impulse response processing.[*]

The virtual stage on which you now can put these pre-processed instruments is the sought-after Great Hall of the Vienna Konzerthaus. The microphone is placed in a position which is supposed to be one of the ideal listening positions in this auditory – a seat in the 7th row, approximately. The positioning cues for each instrument plus the resulting reverb are derived from selected impulse responses from the Vienna Symphonic Library's "MIR" project. The graphic below gives you an idea where each instrument is seated:
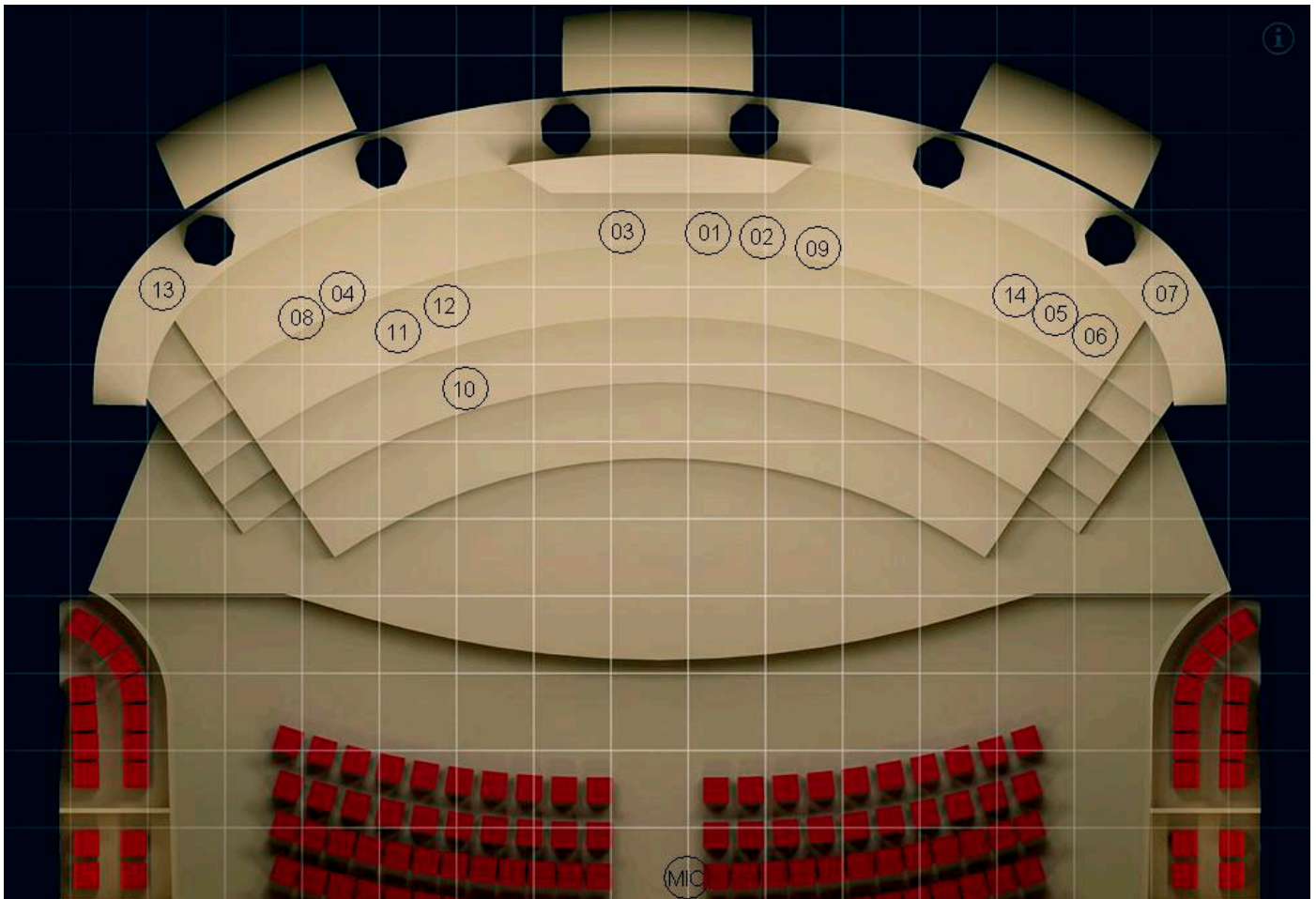
Although pre-processed, these instruments still offer a considerable amount of artistic freedom: The relation between the direct ("dry") signal and the resulting reflections and reverb may be chosen with a turn of the modulation wheel. – However, you should be aware that "full wet" means the absence of *any* direct signal, something that is not very likely to happen in nature. Nevertheless, in this way you will be able to bring an instrument closer to the listener if your arrangement asks for it.

Also, you'll still be able to choose the side on which an instrument is seated: just swap the sides of the left and right channels within your mixing application. Although not true to nature anymore, the result will be convincing and mix perfectly with the other pre-processed percussion instruments.

*) All names and trademarks are property and copyright of their respective companies.

Patches

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01 TIMPANI

Level 1: Timpani single hits and rolls

Drums and percussion set (concert toms, snare and bass drum, tambourine, cymbals, piatti, tam-tam, triangle, rails, whip, hammer)

Celesta, glockenspiel, xylophone, and tubular bells single notes

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01 Tmp-A_wet_Single-Hits   Range: A#1–C7   Samples: 799   RAM: 49 MB   **Level 1**

Single hits, wet
8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
4 Alternations
AB switch: alternation left/right

> **Mapping:**
> A#1–C4: left hand/(right hand)
> A#4–C7: right hand

A: left hand
B: left/right hand   A: right hand

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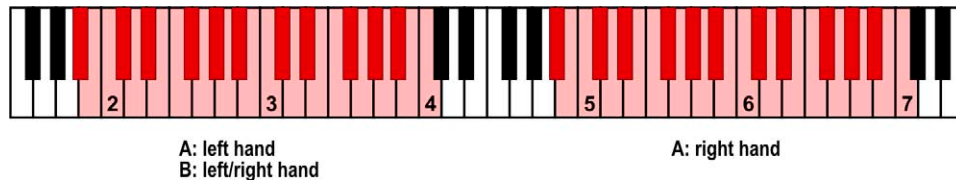
02 Tmp-A_wet_Roll   Range: A#1–C7   Samples: 819   RAM: 51 MB   **Level 1**

Rolls and single hits (2 alternations), wet
Velocity mapping:
Rolls, 6 layers: 0–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–127 ff
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Release samples
AB switch: release duration long/short

> **Mapping:**
> A#1–C4: rolls
> A#4–C7: single hits

Rolls   single hits

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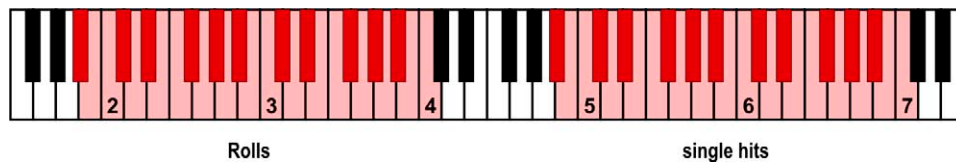
11 Tmp-A_dry_Single-Hits   Range: A#1–C7   Samples: 800   RAM: 50 MB   **Level 1**

Single hits, dry
For a mapping image and velocity layers, see the corresponding "wet" Patch
8 velocity layers
4 Alternations
AB switch: alternation left/right

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12 Tmp-A_dry_Roll   Range: A#1–C7   Samples: 820   RAM: 51 MB   **Level 1**

Rolls and single hits (2 alternations), dry
For a mapping image and velocity layers, see the corresponding "wet" Patch
6 velocity layers
Release samples
AB switch: release duration long/short

02 DRUMS + PERCUSSION

01 Drums+Perc_set_wet   Range: C2–C8   Samples: 634   RAM: 39 MB   **Level 1**

Drum and Percussion set, wet:
Concert toms, snare drum, bass drum, tambourine, cymbals, piatti, tam-tam, triangle, rails, whip, and hammer
Velocity mapping:
Snare drum, 12 layers: 0–10 ppppp, 11–20 pppp, 21–30 ppp, 31–40 pp, 41–50 p, 51–60 mp, 61–70 mf, 71–80 f, 81–90 ff, 91–100 fff, 101–110 ffff, 111–127 fffff
All others, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Release samples
2 Alternations

Mapping:
C2–A3: concert toms 1–6, single notes left/right
C4–D4: snare drum, single notes left/right
F4–G#4: bass drum, single notes left/right, normal and secco (secco on black keys)
A4–A#4: bass drum, tremolo, soft/hard mallet
C5–F5: tambourine, single hits, muted and open, var. 1/2
C#5–D#5: tambourine, tremolo/thumb tremolo
G5–B5: suspended cymbal, single hits stick/hard mallet/soft mallet
C6–D6: piatti, single hits normal/damped fast/slow
E6: tam-tam, single hits
F6–B6: triangle, single hits side and above, var. 1/2
F#6: triangle, tremolo
C7–C8 (white keys): rails 1–4, single hits l/r
C#7–D#7: whip 1/2
F#7–A#7: hammer, repetitions on wood block/board/crate
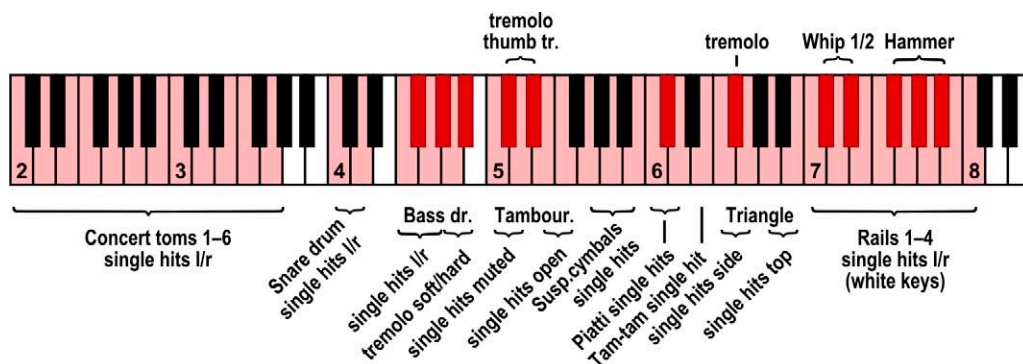
11 Drums+Perc_set_dry   Range: C2–C8   Samples: 638   RAM: 39 MB   **Level 1**

Drum and Percussion set, dry:
Concert toms, snare drum, bass drum, tambourine, cymbals, piatti, tam-tam, triangle, rails, whip, and hammer
For a mapping image and velocity layers, see the corresponding "wet" Patch
12 velocity layers
Release samples

03 MALLETS + BELLS

01 Celesta_wet	Range: C2–F7	Samples: 264	RAM: 16 MB	Level 1

Celesta: Single notes, wet
The samples are mapped an octave lower than they sound
4 velocity layers

02 Glsp_wet	Range: F4–D7	Samples: 204	RAM: 12 MB	Level 1

Glockenspiel: Single notes, wet
The samples are mapped an octave lower than they sound
3 velocity layers
2 Alternations

03 Xyl_wet	Range: F4–C7	Samples: 264	RAM: 16 MB	Level 1

Xylophone: Single notes, wet
The samples are mapped an octave lower than they sound
3 velocity layers
2 Alternations

04 Tubular_wet	Range: C3–G#5	Samples: 87	RAM: 5 MB	Level 1

Tubular bells: Single notes, wet
3 velocity layers

11 Celesta_dry	Range: C2–F7	Samples: 264	RAM: 16 MB	Level 1

Celesta: Single notes, dry
The samples are mapped an octave lower than they sound
4 velocity layers

12 Glsp_dry	Range: F4–D7	Samples: 204	RAM: 12 MB	Level 1

Glockenspiel: Single notes, dry
The samples are mapped an octave lower than they sound
3 velocity layers
2 Alternations

13 Xyl_dry	Range: F4–C7	Samples: 264	RAM: 16 MB	Level 1

Xylophone: Single notes, dry
The samples are mapped an octave lower than they sound
3 velocity layers
2 Alternations

14 Tubular_dry	Range: C3–G#5	Samples: 87	RAM: 5 MB	Level 1

Tubular bells: Single notes, dry
3 velocity layers

Matrices

Matrix - LEVEL 1 dry

01 Tmp-A dry   **Samples: 800**   **RAM: 50 MB**   **Level 1**

Dry samples
Timpani: Single hits
AB switch: alternation left/right

02 Tmp-A Roll dry   **Samples: 820**   **RAM: 51 MB**   **Level 1**

Dry samples
Timpani: Rolls
AB switch: alternation left/right

03 Drums+Perc dry   **Samples: 638**   **RAM: 39 MB**   **Level 1**

Dry samples
Concert toms, snare drum, bass drum, tambourine, cymbals, piatti, tam-tam, triangle, rails, whip, and hammer

04 Celesta dry   **Samples: 264**   **RAM: 16 MB**   **Level 1**

Dry samples
Celesta: Single notes
The samples are mapped an octave lower than they sound

05 Glockenspiel dry   **Samples: 204**   **RAM: 12 MB**   **Level 1**

Dry samples
Glockenspiel: Single notes
The samples are mapped an octave lower than they sound

06 Xylophone dry   **Samples: 264**   **RAM: 16 MB**   **Level 1**

Dry samples
Xylophone: Single notes
The samples are mapped an octave lower than they sound

07 Tubular bells dry   **Samples: 87**   **RAM: 5 MB**   **Level 1**

Dry samples
Tubular bells: Single notes

Matrix - LEVEL 1 wet

01 Tmp-A wet   **Samples: 799**   **RAM: 49 MB**   **Level 1**

Wet samples
Timpani: Single hits

02 Tmp-A Roll wet   **Samples: 819**   **RAM: 51 MB**   **Level 1**

Wet samples
Timpani: Rolls

03 Drums+Perc wet	**Samples: 634**	**RAM: 39 MB**	**Level 1**

Wet samples
Concert toms, snare drum, bass drum, tambourine, cymbals, piatti, tam-tam, triangle, rails, whip, and hammer

04 Celesta wet	**Samples: 264**	**RAM: 16 MB**	**Level 1**

Wet samples
Celesta: Single notes
The samples are mapped an octave lower than they sound

05 Glockenspiel wet	**Samples: 204**	**RAM: 12 MB**	**Level 1**

Wet samples
Glockenspiel: Single notes
The samples are mapped an octave lower than they sound

06 Xylophone wet	**Samples: 264**	**RAM: 16 MB**	**Level 1**

Wet samples
Xylophone: Single notes
The samples are mapped an octave lower than they sound

07 Tubular bells wet	**Samples: 87**	**RAM: 5 MB**	**Level 1**

Wet samples
Tubular bells: Single notes

Matrix - LEVEL 1 X-fade

01 Tmp-A X-Fade	**Samples: 1599**	**RAM: 99 MB**	**Level 1**

Wet and dry samples
Timpani: Single hits
Cell crossfading between wet and dry samples

02 Tmp-A Roll X-fade	**Samples: 1639**	**RAM: 102 MB**	**Level 1**

Wet and dry samples
Timpani: Rolls
Cell crossfading between wet and dry samples

03 Drums+Perc X-fade	**Samples: 1272**	**RAM: 79 MB**	**Level 1**

Wet and dry samples
Concert toms, snare drum, bass drum, tambourine, cymbals, piatti, tam-tam, triangle, rails, whip, and hammer
Cell crossfading between wet and dry samples

04 Celesta X-fade	**Samples: 528**	**RAM: 33 MB**	**Level 1**

Wet and dry samples
Celesta: Single notes
Cell crossfading between wet and dry samples
The samples are mapped an octave lower than they sound

05 Glockenspiel X-fade	**Samples: 408**	**RAM: 25 MB**	**Level 1**

Wet and dry samples
Glockenspiel: Single notes
Cell crossfading between wet and dry samples
The samples are mapped an octave lower than they sound

| **06 Xylophone X-fade** | **Samples: 528** | **RAM: 33 MB** | **Level 1** |

Wet and dry samples
Xylophone: Single notes
Cell crossfading between wet and dry samples
The samples are mapped an octave lower than they sound

| **07 Tubular bells X-fade** | **Samples: 174** | **RAM: 10 MB** | **Level 1** |

Wet and dry samples
Tubular bells: Single notes
Cell crossfading between wet and dry samples

Presets

| **Orchestral Percussion Set dry** | **Samples: 2678** | **RAM: 167 MB** | **Level 1** |

Dry Patches
01 Tmp-A
02 Tmp-A Roll
04 Celesta
05 Glockenspiel
06 Xylophone
07 Tubular bells
03 Drums+Perc
03 Drums+Perc (-6dB)
Keyswitches: C1–G1

| **Orchestral Percussion Set wet** | **Samples: 2672** | **RAM: 167 MB** | **Level 1** |

Wet Patches
01 Tmp-A
02 Tmp-A Roll
04 Celesta
05 Glockenspiel
06 Xylophone
07 Tubular bells
03 Drums+Perc
03 Drums+Perc (-6dB)
Keyswitches: C1–G1

| **Orchestral Percussion Set X-fade** | **Samples: 5350** | **RAM: 334 MB** | **Level 1** |

X-fade Patches
01 Tmp-A
02 Tmp-A Roll
04 Celesta
05 Glockenspiel
06 Xylophone
07 Tubular bells
03 Drums+Perc
03 Drums+Perc (-6dB)
Keyswitches: C1–G1

81 Timpani

Description

The timpani, or kettledrum, an established member of the symphony orchestra since the 17th century, is the percussion instrument with the longest tradition. It is a skin-covered instrument with definite pitch. As the loudest of all orchestra instruments it requires tremendous precision of the timpanist.

In Romantic and modern works four timpani are usual. In the Classical period one pair was standard.

Range and notation

The kettledrum has a range of about a sixth.

A timpani group composed of several instruments covers approximately two octaves (B1–C3).

In modern-day notation the timpani part is written non-transposing, always in bass clef.

Sound characteristics

Dull, thunderous, booming, deep, heavy, powerful, mellow, velvety, substantial, resonant, round, rumbling, dead, dry, hollow.

Basically the timpani sound is composed of two elements, the attack and the resonance. The resonance of a *mf* tone lasts about 4–5 seconds on the large drum and 3–4 seconds on the small one.

The timbre is determined by three factors: what the mallets are made of, where the head is struck and how hard the head is struck.

Combination with other instruments

Played in *unison* and in *unison* with additional octave doubling with the bass instruments of the other instrument groups (bassoon, bass clarinet, cello, double bass, bass trombone and bass tuba) the timpani produce a fairly homogeneous blend.

Timpani and trumpets form a pairing rooted in history; the significance of their sound and symbolism lies in the tonal development of magnificence: the timpani form a powerful base upon which stirring trumpet fanfares resound. There is no tonal blend between the two instruments, their sounds complement each other to marvelous effect.

All the sound combinations with the woodwinds develop best in *piano* passages.

The strings' tremolo chords, played over a foundation of timpani rolls, are tremendously dramatic and one of this combination's most thrilling effects.

<div style="border:1px solid">

Patches

</div>

01 TIMPANI - A

Level 1: Single hits normal and secco
1–3 upbeats
Rolls normal and strong dynamics (1, 2, 4, and 6 sec.)
Level 2: Glissandos 4th and 5th, up and down
Performance repetitions slow and fast
Rolls medium dynamics (1–6 sec.), strong dynamics (3 sec.)
Rolls glissandos 4th and 5th, up and down

01 TIMPANI - A/01 Standard Mallet

01 Tmp-A_Single-Hits **Range: A#1–C7** **Samples: 800** **RAM: 50 MB** **Level 1**

Single hits, normal
8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
4 Alternations
AB switch: alternation left/right

> **Mapping:**
> A#1–C4: left hand/(right hand)
> A#4–C7: right hand

A: left hand
B: left/right hand   A: right hand

02 Tmp-A_Single-Hits_secco **Range: A#1–C7** **Samples: 400** **RAM: 25 MB** **Level 1**

Single hits, secco
8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
2 Alternations
AB switch: alternation left/right

> **Mapping:**
> A#1–C4: left hand/(right hand)
> A#4–C7: right hand

A: left hand
B: left/right hand   A: right hand

11 Tmp-A_Gliss_5-up **Range: C2–G3** **Samples: 40** **RAM: 2 MB** **Level 2**

Single hits, glissando: 4th up
4 velocity layers

12 Tmp-A_Gliss_7-up **Range: C2–F3** **Samples: 40** **RAM: 2 MB** **Level 2**

Single hits, glissando: 5th up
4 velocity layers

13 Tmp-A_Gliss_5-do Single hits, glissando: 4th down 4 velocity layers	**Range: F2–C4**	**Samples: 40**	**RAM: 2 MB**	**Level 2**
14 Tmp-A_Gliss_7-do Single hits, glissando: 5th down 4 velocity layers	**Range: G2–C4**	**Samples: 40**	**RAM: 2 MB**	**Level 2**
21 Tmp-A_UB-a1 Upbeats: 1 upbeat 4 velocity layers	**Range: C2–C4**	**Samples: 52**	**RAM: 3 MB**	**Level 1**
22 Tmp-A_UB-a2 Upbeats: 2 upbeats 4 velocity layers	**Range: C2–C4**	**Samples: 52**	**RAM: 3 MB**	**Level 1**
23 Tmp-A_UB-a3 Upbeats: 3 upbeats 4 velocity layers	**Range: C2–C4**	**Samples: 52**	**RAM: 3 MB**	**Level 1**

31 Tmp-A_perf-rep_slow   **Range: C2–C7**   **Samples: 416**   **RAM: 26 MB**   **Level 2**

Performance repetitions, slow
4 velocity layers
AB switch: alternation left/right

> **Mapping:**
> C2–C4: left hand/(right hand)
> C5–C7: right hand

A: left hand
B: left/right hand   A: right hand

32 Tmp-A_perf-rep_fast   **Range: C2–C7**   **Samples: 416**   **RAM: 26 MB**   **Level 2**
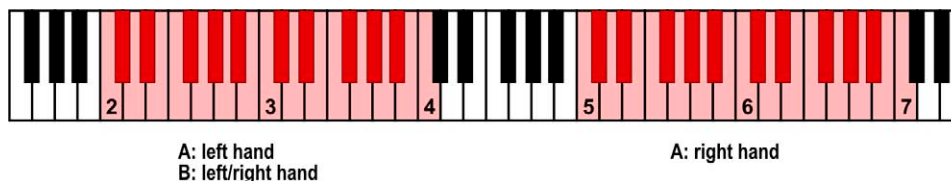
Performance repetitions, fast
4 velocity layers
AB switch: alternation left/right

> **Mapping:**
> C2–C4: left hand/(right hand)
> C5–C7: right hand

A: left hand
B: left/right hand   A: right hand
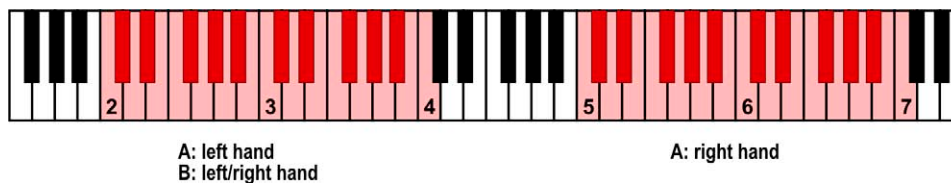
01 TIMPANI - A/02 Standard Mallet Rolls

| **01 Tmp-A_Roll** | **Range: A#1–C7** | **Samples: 820** | **RAM: 51 MB** | **Level 1** |

Rolls and single hits (2 alternations)
Velocity mapping:
Rolls, 6 layers: 0–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–127 ff
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Release samples
AB switch: release duration long/short

Mapping:
A#1–C4: rolls
A#4–C7: single hits

Rolls   single hits
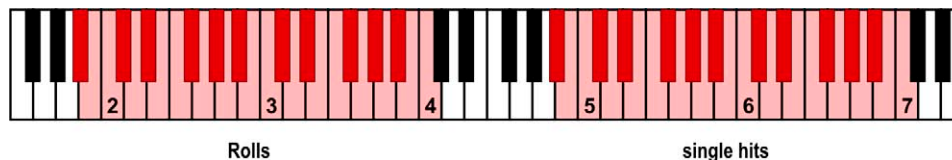
| **02 Tmp-A_Roll_dyn-me_1s** | **Range: C2–C4** | **Samples: 52** | **RAM: 3 MB** | **Level 2** |

Rolls, dynamics medium: 1 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

| **03 Tmp-A_Roll_dyn-me_2s** | **Range: C2–C4** | **Samples: 52** | **RAM: 3 MB** | **Level 2** |

Rolls, dynamics medium: 2 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

| **04 Tmp-A_Roll_dyn-me_3s** | **Range: C2–C4** | **Samples: 52** | **RAM: 3 MB** | **Level 2** |

Rolls, dynamics medium: 3 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

| **05 Tmp-A_Roll_dyn-me_4s** | **Range: C2–C4** | **Samples: 52** | **RAM: 3 MB** | **Level 2** |

Rolls, dynamics medium: 4 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

| **06 Tmp-A_Roll_dyn-me_6s** | **Range: C2–C4** | **Samples: 52** | **RAM: 3 MB** | **Level 2** |

Rolls, dynamics medium: 6 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

| **07 Tmp-A_Roll_dyn-str_1s** | **Range: C2–C4** | **Samples: 26** | **RAM: 1 MB** | **Level 1** |

Rolls, dynamics strong: 1 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

| **08 Tmp-A_Roll_dyn-str_2s** | **Range: C2–C4** | **Samples: 26** | **RAM: 1 MB** | **Level 1** |

Rolls, dynamics strong: 2 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

09 Tmp-A_Roll_dyn-str_3s	**Range: C2–C4**	**Samples: 26**	**RAM: 1 MB**	**Level 2**
Rolls, dynamics strong: 3 sec. tone length 1 velocity layer AB switch: crescendo/diminuendo				
10 Tmp-A_Roll_dyn-str_4s	**Range: C2–C4**	**Samples: 26**	**RAM: 1 MB**	**Level 1**
Rolls, dynamics strong: 4 sec. tone length 1 velocity layer AB switch: crescendo/diminuendo				
11 Tmp-A_Roll_dyn-str_6s	**Range: C2–C4**	**Samples: 26**	**RAM: 1 MB**	**Level 1**
Rolls, dynamics strong: 6 sec. tone length 1 velocity layer AB switch: crescendo/diminuendo				
21 Tmp-A_Roll_Gliss_5-up	**Range: C2–G3**	**Samples: 30**	**RAM: 1 MB**	**Level 2**
Rolls, glissando: 4th up 3 velocity layers				
22 Tmp-A_Roll_Gliss_7-up	**Range: C2–F3**	**Samples: 30**	**RAM: 1 MB**	**Level 2**
Rolls, glissando: 5th up 3 velocity layers				
23 Tmp-A_Roll_Gliss_5-do	**Range: F2–C4**	**Samples: 30**	**RAM: 1 MB**	**Level 2**
Rolls, glissando: 4th down 3 velocity layers				
24 Tmp-A_Roll_Gliss_7-do	**Range: G2–C4**	**Samples: 30**	**RAM: 1 MB**	**Level 2**
Rolls, glissando: 5th down 3 velocity layers				

02 TIMPANI - B

02 TIMPANI - B/01 Medium Mallet

Level 2: Single hits normal, secco, coperto
Glissandos, 1 and 2 sec.; up, minor 2nd to 4th; down
1–4 upbeats
Performance repetitions slow, medium, and fast
Rolls normal and short
Rolls medium and strong dynamics, 1, 2, and 3 sec.
Rolls glissandos, 1 and 2 sec.; up, minor 2nd to 4th; down

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01 Tmp-B_ME_Single-Hits   **Range: B1–A#6**   **Samples: 276**   **RAM: 17 MB**   **Level 2**

Single hits, normal
6 velocity layers: 0–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–127 ff
2 Alternations
AB switch: alternation left/right

Mapping:
B1–A#3: left hand/(right hand)
B4–A#6: right hand

A: left hand
B: left/right hand
A: right hand

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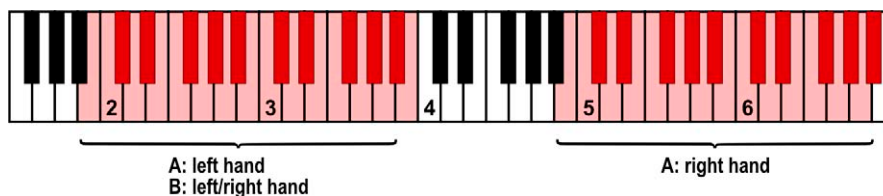
02 Tmp-B_ME_Single-Hits_secco   **Range: C2–A#6**   **Samples: 57**   **RAM: 3 MB**   **Level 2**

Single hits, secco
3 velocity layers
2 Alternations
AB switch: alternation left/right

Mapping:
C2–A#3: left hand/(right hand)
C5–A#6: right hand

A: left hand
B: left/right hand
A: right hand

| **03 Tmp-B_ME_Single-Hits_coperto** | **Range: C2–A#6** | **Samples: 114** | **RAM: 7 MB** | **Level 2** |

Single hits, coperto
3 velocity layers
2 Alternations
AB switch: alternation left/right

      Mapping:
      C2–A#3: left hand/(right hand)
      C5–A#6: right hand

A: left hand
B: left/right hand   A: right hand

| **11 Tmp-B_ME_Gliss-1s_1-up** | **Range: C2–A3** | **Samples: 16** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Min. 2nd up, 1 sec. tone length
2 velocity layers

| **12 Tmp-B_ME_Gliss-1s_2-up** | **Range: C2–A3** | **Samples: 14** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Maj. 2nd up, 1 sec. tone length
2 velocity layers

| **13 Tmp-B_ME_Gliss-1s_3-up** | **Range: C2–A3** | **Samples: 13** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Min. 3rd up, 1 sec. tone length
2 velocity layers

| **14 Tmp-B_ME_Gliss-1s_4-up** | **Range: C2–G#3** | **Samples: 13** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Maj. 3rd up, 1 sec. tone length
2 velocity layers

| **15 Tmp-B_ME_Gliss-1s_5-up** | **Range: C2–G3** | **Samples: 12** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: 4th up, 1 sec. tone length
2 velocity layers

| **16 Tmp-B_ME_Gliss-1s_do** | **Range: D2–F3** | **Samples: 9** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Min. 2nd down, 1 sec. tone length
2 velocity layers

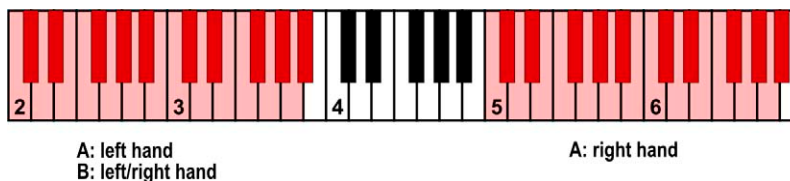| **17 Tmp-B_ME_Gliss-2s_1-up** | **Range: C2–F3** | **Samples: 12** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Min. 2nd up, 2 sec. tone length
2 velocity layers

| **18 Tmp-B_ME_Gliss-2s_2-up** | **Range: C2–F3** | **Samples: 12** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Maj. 2nd up, 2 sec. tone length
2 velocity layers

| **19 Tmp-B_ME_Gliss-2s_3-up** | **Range: C2–F3** | **Samples: 12** | **RAM: 1 MB** | **Level 2** |

Single hits, glissando: Min. 3rd up, 2 sec. tone length
2 velocity layers

20 Tmp-B_ME_Gliss-2s_4-up	**Range: C2–F3**	**Samples: 12**	**RAM: 1 MB**	**Level 2**

Single hits, glissando: Maj. 3rd up, 2 sec. tone length
2 velocity layers

21 Tmp-B_ME_Gliss-2s_5-up	**Range: C2–F3**	**Samples: 12**	**RAM: 1 MB**	**Level 2**

Single hits, glissando: 4th up, 2 sec. tone length
2 velocity layers

22 Tmp-B_ME_Gliss-2s_do	**Range: D#2–F3**	**Samples: 9**	**RAM: 1 MB**	**Level 2**

Single hits, glissando: Min. 2nd down, 2 sec. tone length
2 velocity layers

31 Tmp-B_ME_UB-a1	**Range: C2–A#3**	**Samples: 30**	**RAM: 1 MB**	**Level 2**

Upbeats: 1 upbeat
3 velocity layers

32 Tmp-B_ME_UB-a2	**Range: C2–A#3**	**Samples: 30**	**RAM: 1 MB**	**Level 2**

Upbeats: 2 upbeats
3 velocity layers

33 Tmp-B_ME_UB-a3	**Range: C2–A#3**	**Samples: 30**	**RAM: 1 MB**	**Level 2**

Upbeats: 3 upbeats
3 velocity layers

34 Tmp-B_ME_UB-a4	**Range: C2–A#3**	**Samples: 30**	**RAM: 1 MB**	**Level 2**

Upbeats: 4 upbeats
3 velocity layers

35 Tmp-B_perf-rep_slow (medium/fast)	**Range: C2–A#6**	**Samples: 264**	**RAM: 16 MB**	**Level 2**

Performance repetitions, slow/medium/fast
3 velocity layers
AB switch: alternation left/right

    Mapping:
    C2–A#3: left hand/(right hand)
    C5–A#6: right hand

A: left hand
B: left/right hand

A: right hand

02 TIMPANI - B/02 Medium Mallet Rolls

01 Tmp-B_ME_Roll	**Range: B1–A#6**	**Samples: 393**	**RAM: 24 MB**	**Level 2**

Rolls and single hits
Velocity mapping:
Rolls, 4 layers
Single hits, 6 layers
Release samples
AB switch: release duration long/short

Mapping:
B1–A#3: Rolls
B4–A#6: Single hits
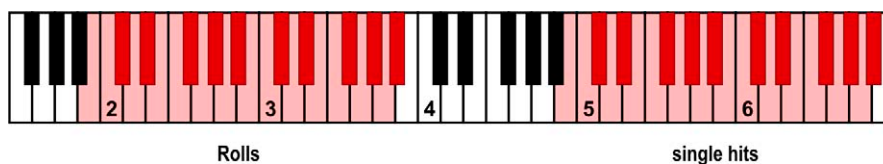
Rolls   single hits

02 Tmp-B_ME_Roll_short	**Range: B1–A#6**	**Samples: 393**	**RAM: 24 MB**	**Level 2**

Short rolls and single hits
Velocity mapping:
Rolls, 4 layers
Single hits, 6 layers
Release samples
AB switch: release duration long/short

Mapping:
B1–A#3: Rolls
B4–A#6: Single hits

Rolls   single hits
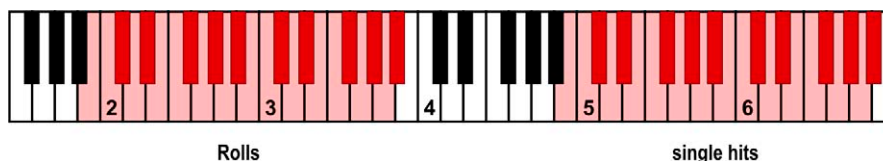
03 Tmp-B_ME_Roll_dyn-me_1s	**Range: C2–A#3**	**Samples: 44**	**RAM: 2 MB**	**Level 2**

Rolls, dynamics medium, 1 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

04 Tmp-B_ME_Roll_dyn-me_2s	**Range: C2–A#3**	**Samples: 44**	**RAM: 2 MB**	**Level 2**

Rolls, dynamics medium, 2 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

05 Tmp-B_ME_Roll_dyn-me_4s	**Range: C2–A#3**	**Samples: 44**	**RAM: 2 MB**	**Level 2**

Rolls, dynamics medium, 4 sec. tone length
2 velocity layers
AB switch: crescendo/diminuendo

06 Tmp-B_ME_Roll_dyn-str_1s	**Range: C2–A#3**	**Samples: 22**	**RAM: 1 MB**	**Level 2**

Rolls, dynamics strong, 1 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

07 Tmp-B_ME_Roll_dyn-str_2s	**Range: C2–A#3**	**Samples: 22**	**RAM: 1 MB**	**Level 2**

Rolls, dynamics strong, 2 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

08 Tmp-B_ME_Roll_dyn-str_4s	**Range: C2–A#3**	**Samples: 22**	**RAM: 1 MB**	**Level 2**

Rolls, dynamics strong, 4 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

11 Tmp-B_ME_Roll_Gliss-1s_1-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Min. 2nd up, 1 sec. tone length
2 velocity layers

12 Tmp-B_ME_Roll_Gliss-1s_2-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Maj. 2nd up, 1 sec. tone length
2 velocity layers

13 Tmp-B_ME_Roll_Gliss-1s_3-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Min. 3rd up, 1 sec. tone length
2 velocity layers

14 Tmp-B_ME_Roll_Gliss-1s_4-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Maj. 3rd up, 1 sec. tone length
2 velocity layers

15 Tmp-B_ME_Roll_Gliss-1s_5-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: 4th up, 1 sec. tone length
2 velocity layers

16 Tmp-B_ME_Roll_Gliss-1s_do	**Range: D2–F3**	**Samples: 9**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Min. 2nd down, 1 sec. tone length
2 velocity layers

17 Tmp-B_ME_Roll_Gliss-2s_1-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Min. 2nd up, 2 sec. tone length
2 velocity layers

18 Tmp-B_ME_Roll_Gliss-2s_2-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Maj. 2nd up, 2 sec. tone length
2 velocity layers

19 Tmp-B_ME_Roll_Gliss-2s_3-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Min. 3rd up, 2 sec. tone length
2 velocity layers

20 Tmp-B_ME_Roll_Gliss-2s_4-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: Maj. 3rd up, 2 sec. tone length
2 velocity layers

21 Tmp-B_ME_Roll_Gliss-2s_5-up	**Range: C2–F#3**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rolls, glissando: 4th up, 2 sec. tone length
2 velocity layers

22 Tmp-B_ME_Roll_Gliss-2s_do   Range: D#2–E3   Samples: 8   RAM: 1 MB   **Level 2**

Rolls, glissando: Min. 2nd down, 2 sec. tone length
2 velocity layers

02 TIMPANI - B/03 Hard Mallet

Level 2: Single hits
1–4 upbeats
Rolls normal and strong dynamics (1, 2, and 4 sec.)

01 Tmp-B_HA_Single-Hits   Range: C2–A#6   Samples: 80   RAM: 5 MB   **Level 2**
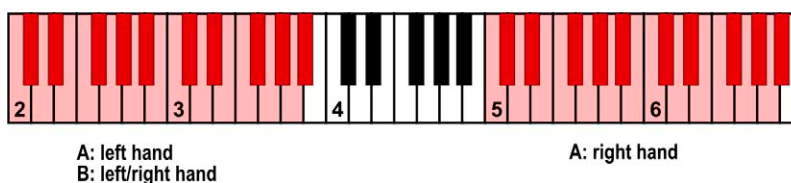
Single hits
4 velocity layers
2 Alternations
AB switch: alternation left/right

Mapping:
C2–A#3: left hand/(right hand)
C5–A#6: right hand

A: left hand
B: left/right hand
A: right hand

02 Tmp-B_HA_UB-a1   Range: C2–A#3   Samples: 30   RAM: 1 MB   **Level 2**

Upbeats: 1 upbeat
3 velocity layers

03 Tmp-B_HA_UB-a2   Range: C2–A#3   Samples: 30   RAM: 1 MB   **Level 2**

Upbeats: 2 upbeats
3 velocity layers

04 Tmp-B_HA_UB-a3   Range: C2–A#3   Samples: 30   RAM: 1 MB   **Level 2**

Upbeats: 3 upbeats
3 velocity layers

05 Tmp-B_HA_UB-a4   Range: C2–A#3   Samples: 30   RAM: 1 MB   **Level 2**

Upbeats: 4 upbeats
3 velocity layers

02 TIMPANI - B/04 Hard Mallet Rolls

01 Tmp-B_HA_Roll	**Range: C2–A#6**	**Samples: 130**	**RAM: 8 MB**	**Level 2**

Rolls and single hits
Velocity mapping:
Rolls, 3 layers
Single hits, 4 layers
Release samples
AB switch: release duration long/short

Mapping:
C2–A#3: Rolls
C5–A#6: Single hits

rolls   single hits
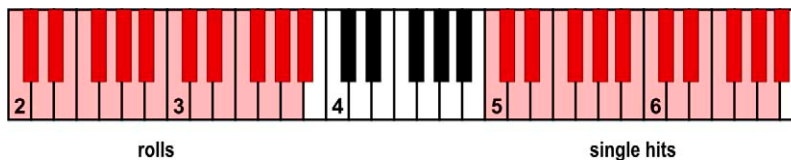
02 Tmp-B_HA_Roll_dyn-str_1s	**Range: C2–A#3**	**Samples: 20**	**RAM: 1 MB**	**Level 2**

Rolls, dynamics strong, 1 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

03 Tmp-B_HA_Roll_dyn-str_2s	**Range: C2–A#3**	**Samples: 20**	**RAM: 1 MB**	**Level 2**

Rolls, dynamics strong, 2 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

04 Tmp-B_HA_Roll_dyn-str_4s	**Range: C2–A#3**	**Samples: 20**	**RAM: 1 MB**	**Level 2**

Rolls, dynamics strong, 4 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

02 TIMPANI - B/05 Wood Mallet

Level 2: Single hits
1–4 upbeats
Rolls normal and strong dynamics (1, 2, and 4 sec.)

01 Tmp-B_WO_Single-Hits	**Range: C2–A#6**	**Samples: 88**	**RAM: 5 MB**	**Level 2**

Single hits
4 velocity layers
2 Alternations
AB switch: alternation left/right

Mapping:
C2–A#3: left hand/(right hand)
C5–A#6: right hand

A: left hand   A: right hand
B: left/right hand
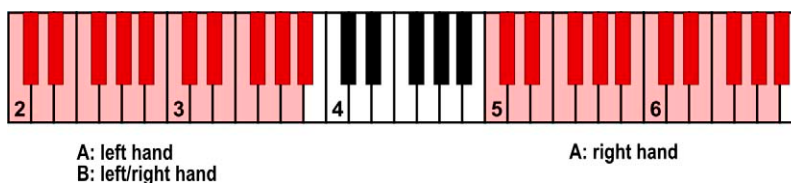
02 Tmp-B_WO_UB-a1	Range: C2–A#3	Samples: 33	RAM: 2 MB	**Level 2**

Upbeats: 1 upbeat
3 velocity layers

03 Tmp-B_WO_UB-a2	Range: C2–A#3	Samples: 33	RAM: 2 MB	**Level 2**

Upbeats: 2 upbeats
3 velocity layers

04 Tmp-B_WO_UB-a3	Range: C2–A#3	Samples: 33	RAM: 2 MB	**Level 2**

Upbeats: 3 upbeats
3 velocity layers

05 Tmp-B_WO_UB-a4	Range: C2–A#3	Samples: 33	RAM: 2 MB	**Level 2**

Upbeats: 4 upbeats
3 velocity layers

02 TIMPANI - B/06 Wood Mallet Rolls

01 Tmp-B_WO_Roll	Range: C2–A#6	Samples: 134	RAM: 8 MB	**Level 2**

Rolls and single hits
Velocity mapping:
Rolls, 3 layers
Single hits, 4 layers
Release samples
AB switch: release duration long/short

Mapping:
C2–A#3: Rolls
C5–A#6: Single hits

rolls   single hits
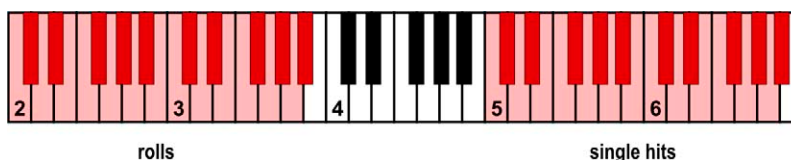
02 Tmp-B_WO_Roll_dyn-str_1s	Range: C2–A#3	Samples: 22	RAM: 1 MB	**Level 2**

Rolls, dynamics strong, 1 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

03 Tmp-B_WO_Roll_dyn-str_2s	Range: C2–A#3	Samples: 22	RAM: 1 MB	**Level 2**

Rolls, dynamics strong, 2 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

04 Tmp-B_WO_Roll_dyn-str_4s	Range: C2–A#3	Samples: 22	RAM: 1 MB	**Level 2**

Rolls, dynamics strong, 4 sec. tone length
1 velocity layer
AB switch: crescendo/diminuendo

02 TIMPANI - B/07 Medium Hard Mallet

Level 2: Single hits

01 Tmp-B_MHA_Single-Hits   Range: C2–A#6   Samples: 100   RAM: 6 MB   **Level 2**

Single hits
5 velocity layers
2 Alternations
AB switch: alternation left/right

Mapping:
C2–A#3: left hand/(right hand)
C5–A#6: right hand

A: left hand
B: left/right hand

A: right hand

02 TIMPANI - B/08 Felt Mallet

Level 2: Single hits

01 Tmp-B_FE_Single-Hits   Range: C2–A#6   Samples: 100   RAM: 6 MB   **Level 2**
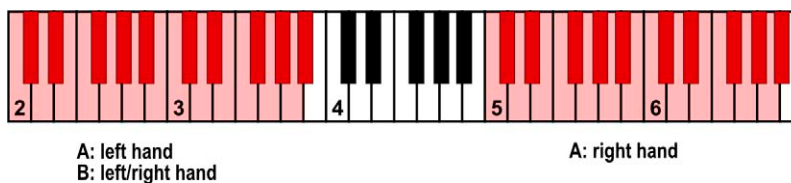
Single hits
5 velocity layers
2 Alternations
AB switch: alternation left/right

Mapping:
C2–A#3: left hand/(right hand)
C5–A#6: right hand

A: left hand
B: left/right hand

A: right hand

02 TIMPANI - B/09 Finger

Level 2: Single hits

01 Tmp-B_Fl_Single-Hits   Range: C2–A#6   Samples: 44   RAM: 2 MB   **Level 2**
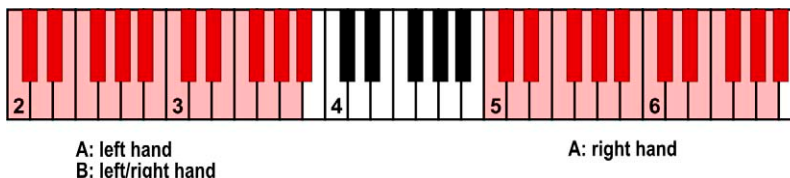
Single hits
2 velocity layers
2 Alternations
AB switch: alternation left/right

Mapping:
C2–A#3: left hand/(right hand)
C5–A#6: right hand

A: left hand
B: left/right hand

A: right hand

Matrices

Matrix - LEVEL 1

L1 Tmp-A Combi   Samples: 1880   RAM: 117 MB   **Level 1**

Single hits, normal and secco
1–3 upbeats
Rolls normal and dynamics, 1, 2, 4, and 6 sec.

Matrix switches: Horizontal: Keyswitches, C1–A1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
V1	hits normal	hits secco	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls dyn. 1 sec.	rolls dyn. 2 sec.	rolls dyn. 4 sec.	rolls dyn. 6 sec.

Matrix - LEVEL 2

01 Tmp-A Combi   Samples: 2888   RAM: 180 MB   **Level 2**

Single hits, normal and secco
Performance repetitions
Glissandos
1–3 upbeats
Rolls normal and glissando

Matrix switches: Horizontal: Keyswitches, C1–A1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
V1	hits normal	perf.rep. slow	gliss. up, 4th	gliss. up, 5th	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls gliss. up, 4th	rolls gliss. up, 5th
V2	hits secco	perf.rep. fast	gliss. down, 4th	gliss. down, 5th	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls gliss. down, 4th	rolls gliss. down, 5th

02 Tmp-A Dynamics-Roll
<div align="right">**Samples: 390**   **RAM: 24 MB**   **Level 2**</div>

Rolls, medium and strong dynamics, 1, 2, 3, 4, and 6 sec.

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
medium dyn.	1 sec.	2 sec.	3 sec.	4 sec.	6 sec.
strong dyn.	1 sec.	2 sec.	3 sec.	4 sec.	6 sec.

11 Tmp-B Mallet-medium Combi
<div align="right">**Samples: 1376**   **RAM: 86 MB**   **Level 2**</div>

Single hits, normal and secco
Performance repetitions
Glissando
1–3 upbeats
Rolls normal and glissando

Matrix switches: Horizontal: Keyswitches, C1–A1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
V1	hits normal	perf.rep. slow	gliss. up 4th, 1 sec.	gliss. up 4th, 2 sec.	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls gliss. up 4th, 1 sec.	rolls gliss. up 4th, 2 sec.
V2	hits secco	perf.rep. fast	gliss. down, 1 sec.	gliss. down, 2 sec.	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls gliss. down, 1 sec.	rolls gliss. down, 2 sec.

12 Tmp-B Mallet-medium Dynamics-Roll
<div align="right">**Samples: 198**   **RAM: 12 MB**   **Level 2**</div>

Rolls, medium and strong dynamics, 1, 2, and 4 sec.

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 2 zones

	C1	C#1	D1
medium dyn.	1 sec.	2 sec.	4 sec.
strong dyn.	1 sec.	2 sec.	4 sec.

13 Tmp-B Mallet-medium Glissandi
<div align="right">**Samples: 146**   **RAM: 9 MB**   **Level 2**</div>

Glissandos, 1 and 2 sec.
Up, min. 2nd–4th, and down

Matrix switches: Horizontal: Keyswitches, C1–F1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
gliss. 1 sec.	min. 2nd up	maj. 2nd up	min. 3rd up	maj. 3rd up	4th up	down
gliss. 2 sec.	min. 2nd up	maj. 2nd up	min. 3rd up	maj. 3rd up	4th up	down

14 Tmp-B Mallet-medium Glissandi-Roll
<div align="right">**Samples: 147**   **RAM: 9 MB**   **Level 2**</div>

Glissando rolls, 1 and 2 sec.
Up, min. 2nd–4th, and down

Matrix switches: Horizontal: Keyswitches, C1–F1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
gliss. 1 sec.	min. 2nd up	maj. 2nd up	min. 3rd up	maj. 3rd up	4th up	down
gliss. 2 sec.	min. 2nd up	maj. 2nd up	min. 3rd up	maj. 3rd up	4th up	down

15 Tmp-B Mallet-hard Combi   Samples: 320   RAM: 20 MB   Level 2

Single hits
1–3 upbeats
Rolls normal and dynamics, 1, 2, and 4 sec.

Matrix switches: Horizontal: Keyswitches, C1–G1

	C1	C#1	D1	D#1	E1	F1	F#1	G1
V1	hits normal	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls dyn. 1 sec.	rolls dyn. 2 sec.	rolls dyn. 4 sec.

16 Tmp-B Mallet-wood Combi   Samples: 343   RAM: 21 MB   Level 2

Single hits
1–3 upbeats
Rolls normal and dynamics, 1, 2, and 4 sec.

Matrix switches: Horizontal: Keyswitches, C1–G1

	C1	C#1	D1	D#1	E1	F1	F#1	G1
V1	hits normal	1 upbeat	2 upbeats	3 upbeats	rolls normal	rolls dyn. 1 sec.	rolls dyn. 2 sec.	rolls dyn. 4 sec.

17 Tmp-B Mallet-additionals   Samples: 244   RAM: 15 MB   Level 2

Single hits with medium hard mallets, felt mallets, and fingers

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	medium hard mallets	felt mallets	fingers

Presets

Tmp-A VSL Preset Level 1   Samples: 1880 RAM: 117 MB   Level 1

Matrix: L1 Tmp-A Combi

Tmp-A VSL Preset Level 2   Samples: 3278 RAM: 204 MB   Level 2

Matrices:
01 Tmp-A Combi
02 Tmp-A Dynamics-Roll
Keyswitches: E7–F7

Tmp-B VSL Preset Level 2   Samples: 2689 RAM: 168 MB   Level 2

Matrices:
11 Tmp-B Mallet-medium Combi
12 Tmp-B Mallet-medium Dynamics-Roll
13 Tmp-B Mallet-medium Glissandi
14 Tmp-B Mallet-medium Glissandi-Roll
21 Tmp-B Mallet-hard Combi
16 Tmp-B Mallet-wood Combi
17 Tmp-B Mallet-additionals
Keyswitches: E7–A#7

82 Drums - Toms

In most cultures, the drum in its various forms is the most important and rudimentary percussion.

The **snare drum** is found in practically every type of western music from military music (where its roots lie) to jazz or the drum kits of rock and pop. At the same time the snare drum is a crucial member of the orchestral percussion section. Extremely shallow versions of the snare drum have become known as piccolo snare drums.

The **bass drum** plays an essential role in several western musical styles as well. Its variable timbre can be used to mark the rhythm not only in large orchestras but also in small ensembles: in military music, where it is played together with the cymbal, or in pop, rock and jazz, where it is played using the bass pedal as part of the drum kit.

The **field drum** or **tenor drum** is used in the orchestra as well as in military and wind bands. It ranks between the snare drum and the bass drum in both size and pitch. Depending on the region it may be snared or unsnared.

The **tambourine** has been an important folk instrument in many European cultures from time immemorial. Today it is especially common in Mediterranean countries where it serves as a rhythm instrument accompanying songs and dances. It is either struck with the hand or shaken. In the orchestra, where it is used as a rhythm and noise instrument to add color and suggest dance scenes, it has had a place since the 19th century.

Patches

01 SNARE DRUM - A

Level 1: Snare on and off
Rimshots, single hits, Performance repettions, rebounds, upbeats, upbeat rolls, rolls normal and dynamics
Level 2: Snare on and off
Performance repetitions dynamics, slow, medium, fast

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01 Snare-A_on   Range: C2–A#7   Samples: 333   RAM: 20 MB   **Level 1**

Rimshots
Single hits (4 Alternations)
Performance repetitions at 60, 120, and 113 BPM
Press rolls
Upbeats, upbeat rolls
Rolls normal and dynamics
Velocity mapping:
Single hits, 12 layers: 0–10 ppppp, 11–20 pppp, 21–30 ppp, 31–40 pp, 41–50 p, 51–60 mp, 61–70 mf, 71–80 f, 81–90 ff, 91–100 fff, 101–110 ffff, 111–127 fffff
Repetitions and tied trills, 6 layers: 0–30 pppp, 31–50 pp, 51–70 mp, 71–90 f, 91–110 fff, 111–127 fffff
All others, 2–5 layers
Release samples
4 Alternations
AB switch: crescendo/diminuendo

Mapping:
C2–D2: Rim clicks, l/r
E2–F2: Rim head, l/r
G2–A2: Rim shaft, l/r
C3–D3: Rim SOS, l/r
E3–F3: Rim SOSOR (l/r)C4–D4: Single hits, l/r
F4–D5: Performance repetitions, slow/medium/fast, alternating (lower key left hand, higher key right hand)
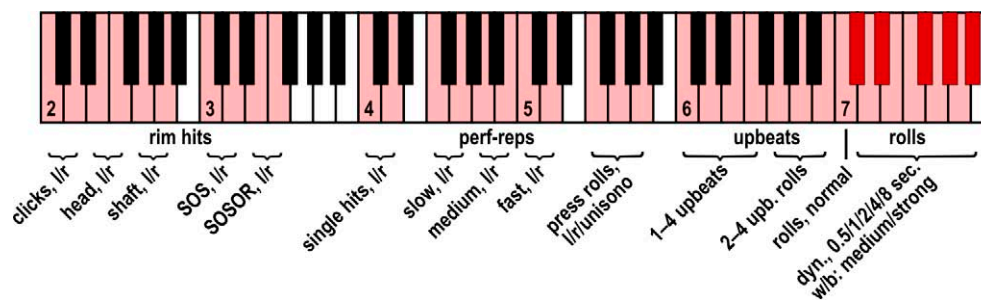F5–A5: press rolls, left/right/unisono
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
C#7–A#7: Rolls, strong and medium dynamics, 0.5, 1, 2, 4, and 8 sec. (AB switch, strong dyn. on black keys)

02 Snare-A_on_perf-rep_dyn9   **Range: C3–A5**   **Samples: 162**   **RAM: 10 MB**   **Level 2**

Performance repetitions
Dynamics, 9 repetitions
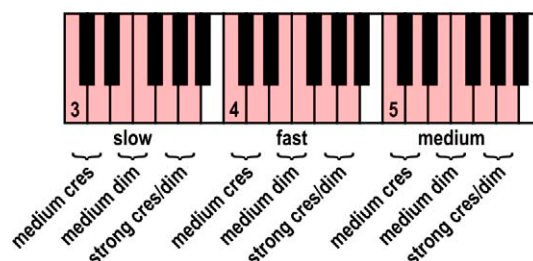Slow, fast, and medium (60, 120, and 113 BPM)
1 velocity layer

Mapping:
C–D – medium crescendo; E–F – medium diminuendo
G – strong crescendo; A – strong diminuendo
C3–A3: Slow
C4–A4: fast
C5–A5: medium speed

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03 Snare-A_off   **Range: C4–G#7**   **Samples: 206**   **RAM: 12 MB**   **Level 1**

Single hits (4 Alternations)
Performance repetitions at 120 and 240 BPM
Upbeats, upbeat rolls
Rolls normal and dynamics
Velocity mapping:
Single hits, 12 layers: 0–10 ppppp, 11–20 pppp, 21–30 ppp, 31–40 pp, 41–50 p, 51–60 mp, 61–70 mf, 71–80 f, 81–90 ff, 91–100 fff, 101–110 ffff, 111–127 fffff
Repetitions, 5 layers: 0–50 pp, 51–70 mp, 71–90 f, 91–110 fff, 111–127 fffff
Upbeats and normal rolls, 6 layers: 0–30 pppp, 31–50 pp, 51–70 mp, 71–90 f, 91–110 fff, 111–127 fffff
Release samples
4 Alternations
AB switch: crescendo/diminuendo
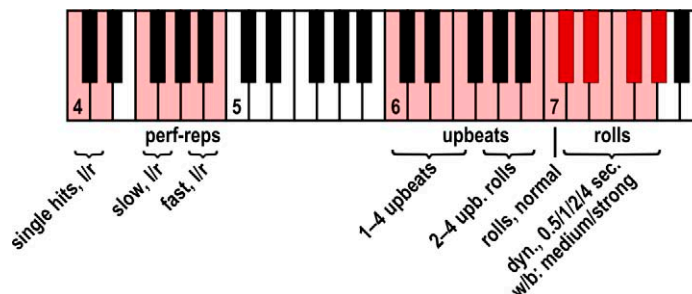
Mapping:
C4–D4: Single hits, l/r
F4–B4: performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
C#7–G#7: Rolls, strong and medium dynamics, 0.5, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

04 Snare-A_off_perf-rep_dyn9   **Range: C3–A4**   **Samples: 108**   **RAM: 6 MB**   **Level 2**

Performance repetitions
Dynamics, 9 repetitions
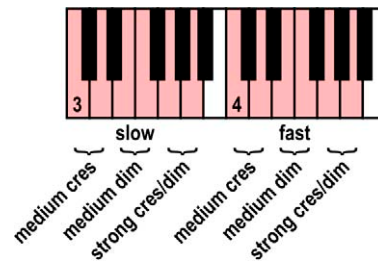Slow and fast
1 velocity layer

Mapping:

C–D – medium crescendo; E–F – medium diminuendo
G – strong crescendo; A – strong diminuendo
C3–A3: slow
C4–A4: fast

02 SNARE DRUM - B

Level 2: Snare on and off
Brushes and sticks, various articulations
Performance repetitions, slow and fast

01 Snare-B_on	Range: C2–G#7	Samples: 126	RAM: 7 MB	**Level 2**

Brushes: Single hits, normal and rim, rubs
Sticks: rim hits and rimshots, rim clicks, open and muted single hits (2 alternations), performance repetitions, press rolls, upbeats, rolls normal and dynamics
Velocity mapping:
Single hits, repetitions, tied trills, upbeats, and normal tremolos, 4 layers
Brush hits, normal, 2 layers
All others, 1 layer
Release samples
2 Alternations
AB switch: crescendo/diminuendo

Mapping:
Brushes:
C2, D2: Single hits (l/r); D#2: Rim hits
E2–B2: Rubs – 2 sec. forte, 6, 14, 19 sec. piano, 11 sec. forte
Sticks:
C3–D3: Rim hit, crossed sticks var. 1/2
E3–F3: Rimshot open/muted
G3–A3: Rim click normal/crossed sticks
C4, D4: Single hits, l/r
C#4, D#4: Single hits, muted, l/r
F4–B4: Performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
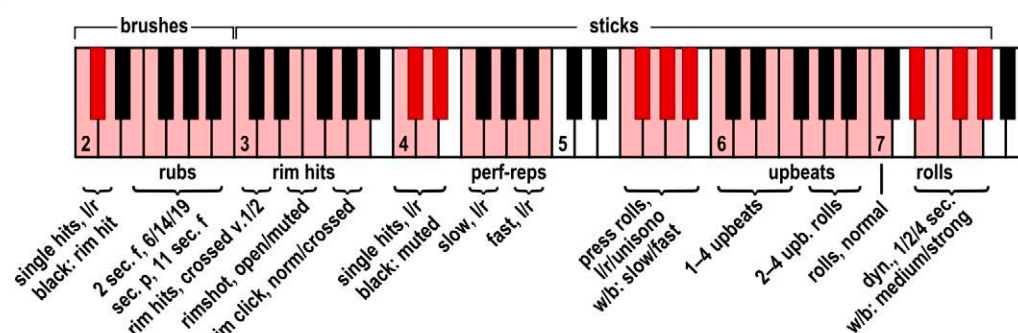F5–A#5: Press rolls, left/right/unisono (white keys slow, black keys fast)
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

02 Snare-B_on_perf-rep_dyn9   Range: C3–A4   Samples: 108   RAM: 6 MB   Level 2

Performance repetitions
Medium and strong dynamics, 9 repetitions
Slow and fast
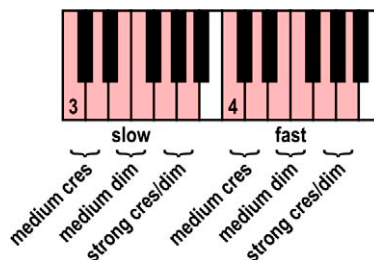1 velocity layer

Mapping:
C3–A3 – slow (16ths, 87 BPM)
C4–A4 – fast (16ths, 138 BPM)
C–D: medium crescendo, p–mf/mf–ff
E–F: medium diminuendo, ff–mf/mf–p
G: Strong crescendo, pp–ff
A: Strong diminuendo, ff–pp

03 Snare-B_off   Range: C4–G#7   Samples: 102   RAM: 6 MB   Level 2

Sticks:
Open and muted single hits (2 alternations)
Performance repetitions
Press rolls
Upbeats
Rolls normal and dynamics
4 velocity layers
Release samples
2 Alternations
AB switch: crescendo/diminuendo

Mapping:
C4, D4: Single hits, l/r
C#4, D#4: Single hits, muted, l/r
F4–B4: Performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
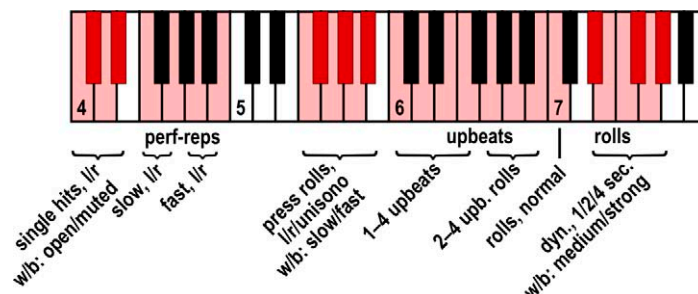F5–A#5: Press rolls, left/right/unisono (white keys slow, black keys fast)
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

04 Snare-B_off_perf-rep_dyn9 Range: C3–A4 Samples: 108 RAM: 6 MB **Level 2**

Performance repetitions
Medium and strong dynamics, 9 repetitions
Slow and fast
1 velocity layer

Mapping:
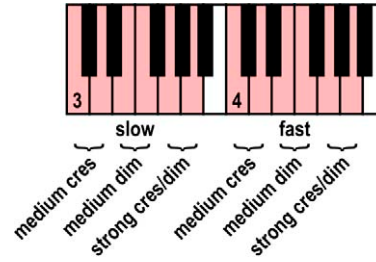
C3–A3 – slow (16ths, 82 BPM)
C4–A4 – fast (16ths, 140 BPM)
C–D: medium crescendo, p–mf/mf–ff
E–F: medium diminuendo, ff–mf/mf–p
G: Strong crescendo, pp–ff
A: Strong diminuendo, ff–pp

O3 SNARE DRUMS a4

Level 1: Snare on and off
Rim and normal, single hits, upbeats, rebounds, rolls
Level 2: Snare on, performance repetitions dynamics, slow and fast
Brushes and timpani mallets, single hits, rolls normal and dynamics

---

O1 Snares-4_on   **Range: C2–B7**   **Samples: 314**   **RAM: 19 MB**   **Level 1**

Rim: Clicks, hits, shots, upbeats, and rolls
Normal: Single hits (4 alternations), performance repetitions, press rolls, upbeats, and rolls
Velocity mapping:
Single hits, 8 layers: 0–30 ppp, 31–50 pp, 51–60 p, 61–70 mp, 71–80 mf, 81–90 f, 91–110 ff, 111–127 fff
Normal rolls, 6 layers: 0–30 pp, 31–50 p, 51–70 mp, 71–90 mf, 91–110 f, 111–127 ff
Rimshots, 1 layer
All others, 3 to 4 layers
Release samples
4 Alternations
AB switch: crescendo/diminuendo

Mapping:
Rim:
C2–D2: Rim clicks, l/r
F2–G2: Rim hits, l/r; F#2: Rim hits, unisono
A2–B2: Rimshots, l/r; A#2: Rimshots, unisono
C3–F3: 1–4 rim upbeats
G3: Rim rolls, normal
A3–B3: Rim tremolo dynamics, 1, 2, and 3 sec. (AB switch)
Normal:
C4–D4: Single hits, l/r; C#4: Single hits, unisono
F4–D5: Performance repetitions, slow/medium/fast, alternating (lower key left hand, higher key right hand)
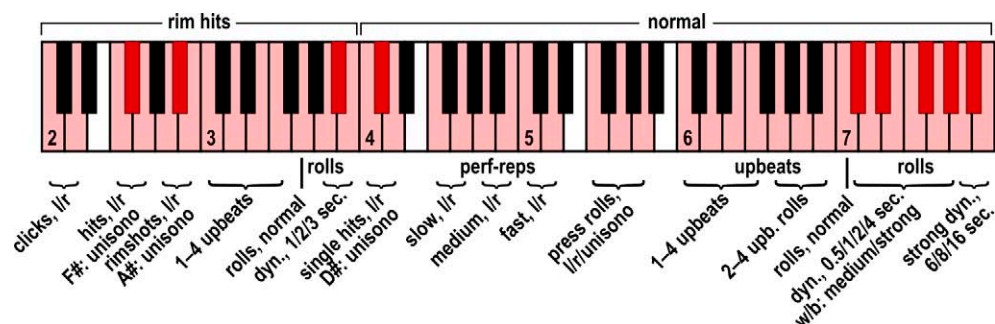F5–A5: Rebounds, left/right/unisono
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
C#7–G#7: Rolls, medium and strong dynamics, 0.5, 1, 2, and 4 sec. (AB switch cres-dim, strong dyn. on black keys)
A7–B7: Rolls, strong dynamics, 6, 8, and 16 sec. (AB switch cres-dim)

02 Snares-4_on_perf-rep_dyn9   Range: C3–D4   Samples: 36   RAM: 2 MB   **Level 2**

Performance repetitions
Dynamics, 9 repetitions
4ths and 8ths at 120 BPM
1 velocity layer

      Mapping:
      C3–D3: crescendo/diminuendo, slow (4ths at 120 BPM)
      C4–D4: crescendo/diminuendo, fast (8ths at 120 BPM)

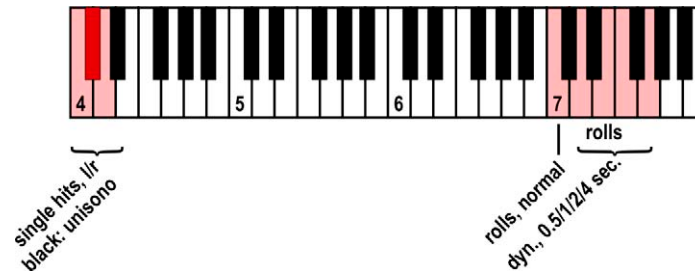**03 Snares-4_off**   Range: C4–G7   Samples: 64   RAM: 4 MB   **Level 1**

Single hits (4 alternations)
Rolls normal, and strong dynamics
4 velocity layers
Release samples
4 Alternations
AB switch: crescendo/diminuendo

      Mapping:
      C4–D4: Single hits, l/r; C#4: Single hits, unisono
      C7: Rolls normal
      D7–G7: Rolls, strong dynamics, 0.5, 1, 2, and 4 sec. (AB switch)

04 Snares-4_Brush **Range: C4–G7** **Samples: 50** **RAM: 3 MB** **Level 2**

Single hits (2 alternations)
Rubs
Rolls normal, and strong dynamics
Velocity mapping:
Single hits and normal tremolos, 4 layers
All others, 1 layer
Release samples
2 Alternations
AB switch: crescendo/diminuendo

> **Mapping:**
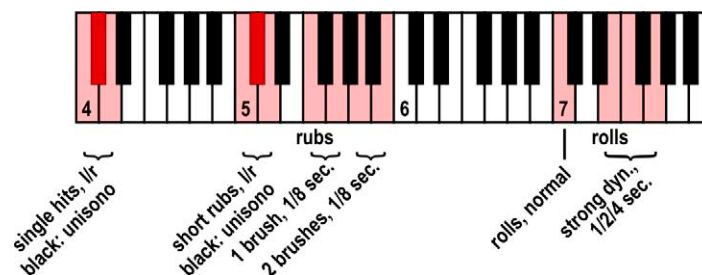> C4–D4: Single hits, l/r; C#4: Single hits, unisono
> C5–D5: Short rubs, l/r; C#4: Short rubs, unisono
> F5–G5: Rubs, 1 brush, 1 and 8 sec.
> A5–B5: Rubs, 2 brushes, 1 and 8 sec.
> C7: Rolls normal
> E7–G7: Rolls, strong dynamics, 1, 2, and 4 sec. (AB switch)

05 Snares-4_Tmp **Range: C4–G7** **Samples: 62** **RAM: 3 MB** **Level 2**

Single hits (4 alternations)
Rolls normal, and strong dynamics
4 velocity layers
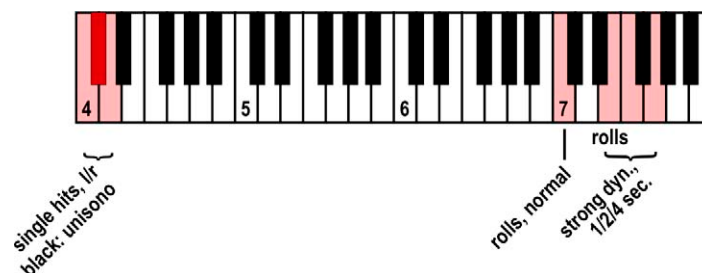Release samples
4 Alternations
AB switch: crescendo/diminuendo

> **Mapping:**
> C4–D4: Single hits, l/r; C#4: Single hits, unisono
> C7: Rolls normal
> E7–G7: Rolls, strong dynamics, 1, 2, and 4 sec. (AB switch)

04 PICCOLO DRUM

Level 2: Single hits open and muted, rebounds, upbeats, rolls normal and dynamics
Performance repetitions, medium and strong dynamics, slow and fast

01 Piccolo-Drum **Range: C4–G#7** **Samples: 102** **RAM: 6 MB** **Level 2**

Open and muted hits (2 alternations)
Performance repetitions
Press rolls
Upbeats
Rolls normal and dynamics
4 velocity layers
Release samples
2 Alternations
AB switch: crescendo/diminuendo

Mapping:
C4, D4: Single hits, l/r
C#4, D#4: Single hits, muted l/r
F4–B4: Performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
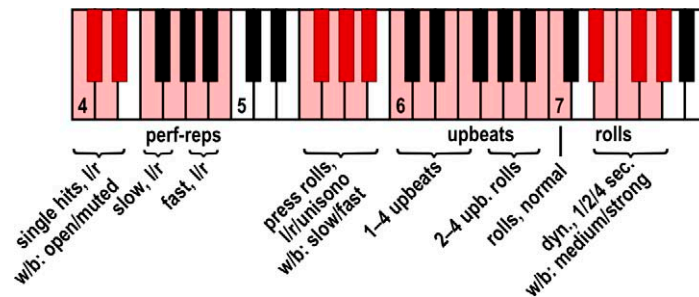F5–A#5: Press rolls, left/right/unisono (white keys slow, black keys fast)
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

02 Piccolo-Drum_perf-rep_dyn9   **Range: C3–A4**   **Samples: 108**   **RAM: 6 MB**   **Level 2**

Performance repetitions
Medium and strong dynamics, 9 repetitions
Slow and fast
1 velocity layer

> **Mapping:**
> C3–A3 – slow (85 BPM)
> C4–A4 – fast (135 BPM)
> C–D: Medium crescendo, p–mf/mf–ff
> E–F: Medium diminuendo, ff–mf/mf–p
> G: Strong crescendo, pp–ff
> A: Strong diminuendo, ff–pp

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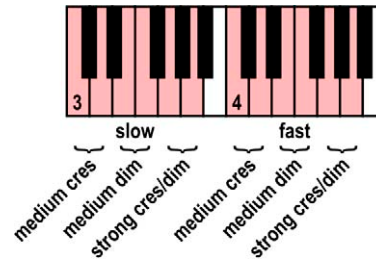
05 FIELD DRUM - A

Level 1: Snare on and off
Single hits, rolls normal and soft

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01 Field-A_on   **Range: C4–D7**   **Samples: 44**   **RAM: 2 MB**   **Level 1**

Single hits (2 Alternations)
Performance repetitions normal and soft
Rolls normal and soft
Velocity mapping:
Single hits, 8 layers: 0–30 ppp, 31–50 pp, 51–60 p, 61–70 mp, 71–80 mf, 81–90 f, 91–110 ff, 111–127 fff
Repetitions and rolls, 4 layers
Release samples

> **Mapping:**
> C4–D4: Single hits, l/r
> F4–G4: Performance repetitions, normal, alternating (lower key left hand, higher key right hand)
> C5–D5: Performance repetitions, soft, alternating (lower key left hand, higher key right hand)
> C7–D7: Rolls normal/soft

O3 Field-A_off   **Range: C4–D7**   **Samples: 44**   **RAM: 2 MB**   **Level 1**

Single hits (2 Alternations)
Performance repetitions normal and soft
Rolls normal and soft
Velocity mapping:
Single hits, 8 layers: 0–30 ppp, 31–50 pp, 51–60 p, 61–70 mp, 71–80 mf, 81–90 f, 91–110 ff, 111–127 fff
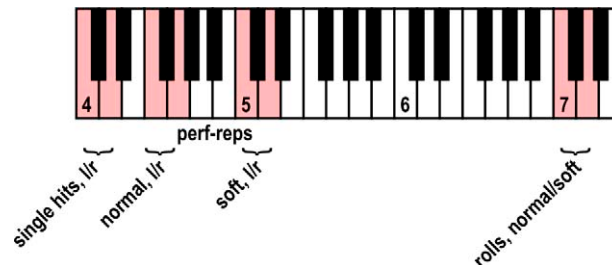Repetitions and rolls, 4 layers
Release samples

Mapping:

C4–D4: Single hits, l/r
F4–G4: Performance repetitions, normal, alternating (lower key left hand, higher key right hand)
C5–D5: Performance repetitions, soft, alternating (lower key left hand, higher key right hand)
C7–D7: Rolls normal/soft

06 FIELD DRUM - B

Level 2: Snare on
Single hits open and muted, rebounds, upbeats, rolls normal and dynamics
Performance repetitions, medium and strong dynamics, slow and fast

---

01 Field-B_on   Range: C4–G#7   Samples: 86   RAM: 5 MB   **Level 2**

Open and muted hits (2 alternations)
Performance repetitions
Press rolls
Upbeats
Rolls normal and dynamics
Velocity mapping:
Normal tremolo, 4 layers
All others, 3 layers
Release samples
2 Alternations
AB switch: crescendo/diminuendo

Mapping:
C4, D4: Single hits, l/r
C#4, D#4: Single hits, muted, l/rF4–B4: Performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
F5–A#5: Press rolls, left/right/unisono (white keys slow, black keys fast)
C6–F6: 1–4 upbeats
G6–B6: 2–4 upbeat rolls
C7: Rolls normal
D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

02 Field-B_on_perf-rep_dyn9   **Range: C3–A4**   **Samples: 108**   **RAM: 6 MB**   **Level 2**

Performance repetitions
Medium and strong dynamics, 9 repetitions
Slow and fast
1 velocity layer

Mapping:
C3–A3 – slow (85 BPM)
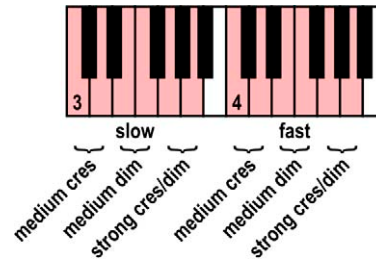C4–A4 – fast (135 BPM)
C–D: medium crescendo, p–mf/mf–ff
E–F: medium diminuendo, ff–mf/mf–p
G: Strong crescendo, p–ff
A: Strong diminuendo, ff–p

07 BASS DRUM - A

Level 1: Soft and hard mallets
Single hits normal/secco, performance repetitions slow and fast, upbeats, rolls normal and dynamics
Level 2: Soft and hard mallets
Performance repetitions, medium and strong dynamics, slow

01 B-Drum-A_SO **Range: C4–G#7** **Samples: 170** **RAM: 10 MB** **Level 1**

Single hits, normal and secco (4 alternations)
Performance repetitions, slow and fast
Upbeats
Rolls normal (AB switch: long/short release) and dynamics
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, upbeats, and normal rolls, 4 layers
Release samples
4 Alternations
AB switch: crescendo/diminuendo

       Mapping:
       C4, D4: Single hits, l/r
       C#4, D#4: Single hits, secco, l/r
       F4–B4: performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
       C6–E6: 1–3 upbeats
       C7: Rolls normal
       D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

02 B-Drum-A_SO_perf-rep_dyn9 **Range: C4–A4** **Samples: 54** **RAM: 3 MB** **Level 2**

Performance repetitions
Medium and strong dynamics, 9 repetitions
Slow
1 velocity layer

       Mapping:
       C4–D4: medium crescendo, pp–mf/mf–fff
       E4–F4: medium diminuendo, fff–mf/mf–pp
       G4: Strong crescendo, pp–fff
       A4: Strong diminuendo, fff–pp

03 B-Drum-A_HA   Range: C4–G#7   Samples: 170   RAM: 10 MB   **Level 1**

Single hits, normal and secco (4 alternations)
Performance repetitions, slow and fast
Upbeats
Rolls normal (AB switch: long/short release) and dynamics
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, upbeats, and normal rolls, 4 layers
Release samples
4 Alternations
AB switch: crescendo/diminuendo
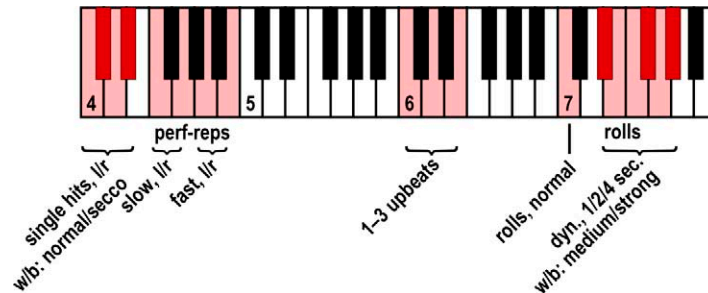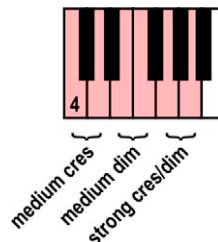
> **Mapping:**
> C4, D4: Single hits, l/r
> C#4, D#4: Single hits, secco, l/r
> F4–B4: performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
> C6–E6: 1–3 upbeats
> C7: Rolls normal
> D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)

04 B-Drum-A_HA_perf-rep_dyn9   Range: C4–A4   Samples: 54   RAM: 3 MB   **Level 2**

Performance repetitions
Medium and strong dynamics, 9 repetitions
Slow
1 velocity layer

> **Mapping:**
> C4–D4: medium crescendo, pp–mf/mf–fff
> E4–F4: medium diminuendo, fff–mf/mf–pp
> G4: Strong crescendo, pp–fff
> A4: Strong diminuendo, fff–pp
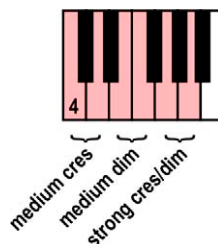
08 BASS DRUM - B

Level 2: Single hits, rim, muted, coperto, normal
Upbeats; rolls normal and dynamics
Performance repetitions, strong dynamics, medium and fast

01 B-Drum-B	Range: C2–G#7	Samples: 98	RAM: 6 MB	**Level 2**

Single hits: Rim, muted, coperto, and normal
Performance repetitions
Upbeats
Rolls normal (AB switch: long/short release) and dynamics
Velocity mapping:
Single hits, 5 layers: 0–35 pp, 36–55 p, 56–88 mf, 89–108 f, 109–127 ff
Normal tremolos, 4 layers
All others, 3 layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
C2–D2: Rim hits, l/r
F2–G2: muted hits, l/r
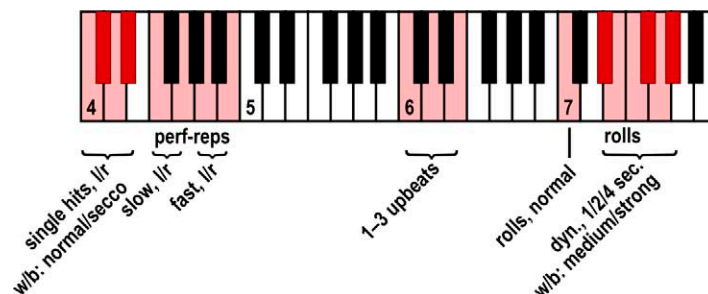C3–D3: Single hits, coperto, l/r
C4, D4: Single hits, l/r
C#4, D#4: Single hits, muted fast, l/r
F4–D5: performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
C6–F6: 1–4 upbeats
C7: Rolls normal
D#7–G#7: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)
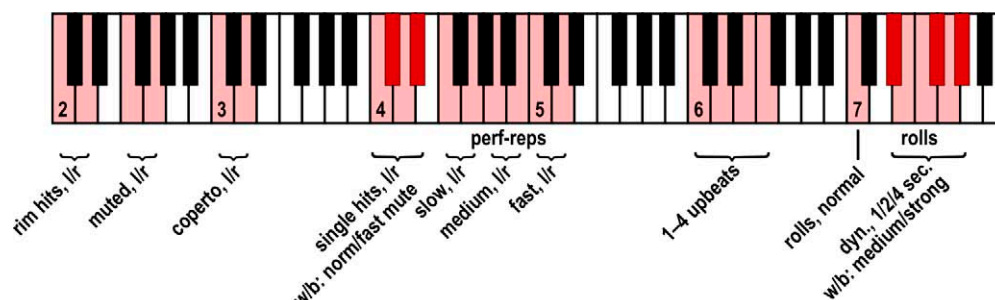
02 B-Drum-B_perf-rep_dyn9	Range: C3–D4	Samples: 36	RAM: 2 MB	**Level 2**

Performance repetitions
Strong dynamics, 9 repetitions
Medium and fast
1 velocity layer

Mapping:
C3–D3: 88 BPM, crescendo/diminuendo
C4–D4: 138 BPM, crescendo/diminuendo
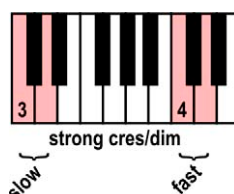
O9 TAIKO DRUMS

Level 1: Single hits
Rolls normal and dynamics
Level 2: Performance repetitions
Effects single hits, rolls

O1 TAIKOS   **Range: C1–A#7**   **Samples: 474**   **RAM: 29 MB**   **Level 1**

Taiko drums 1–7
Single hits (2 alternations)
Rolls normal (AB switch: long/short release) and dynamics
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Rim hits, 2 layers
Rolls, 4 layers
Release samples
2 Alternations
AB switch: crescendo/diminuendo

> **Mapping:**
> C, D: Single hits, l/r
> C#, D#: Rim hits, l/r
> E: Rolls, normal
> F–A#: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)
> Each Taiko spans one octave
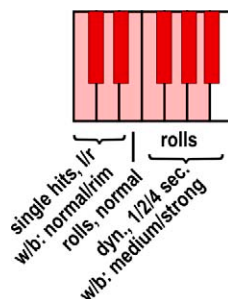
O2 TAIKOS_perf-rep   **Range: C1–D7**   **Samples: 224**   **RAM: 14 MB**   **Level 2**

Taiko drums 1–7
Performance repetitions
4 velocity layers

> **Mapping:**
> C, D: performance repetitions, alternating (lower key left hand, higher key right hand)
> Each Taiko on one octave

03 TAIKOS_FX   **Range: C4–C7**   **Samples: 20**   **RAM: 1 MB**   **Level 2**

Low Taiko
FX single hits
Rolls (AB switch: long/short release)
4 velocity layers
Release samples

    Mapping:
    C4–D4: Single hits, l/r
    C7: Rolls
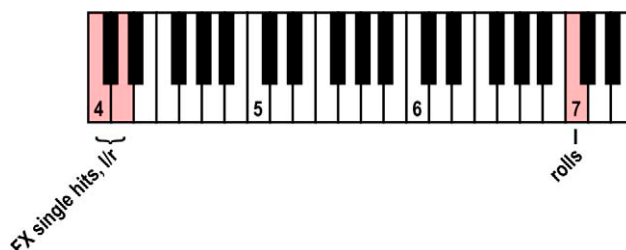
10 CONCERT TOMS

Level 2: Low and high concert toms
Single hits, performance repetitions, rolls normal and crescendo, upbeats
Performance repetitions, medium and strong dynamics

01 Co-Toms_low   **Range: C1–B7**   **Samples: 630**   **RAM: 39 MB**   **Level 2**

Low Concert Toms 1–7
Single hits (2 alternations)
Performance repetitions
Rolls normal and crescendo
1–3 upbeats
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, upbeats, and normal rolls, 4 layers
Release samples
2 Alternations

    Mapping:
    C, D: Single hits, l/r
    C#, D#: performance repetitions, alternating (lower key left hand, higher key right hand)
    E: Rolls, normal
    F–G#: Rolls, strong and medium crescendo, 0.5 and 1 sec. (strong dyn. on black keys)
    A–B: 1–3 upbeats
    Each Tom spans one octave
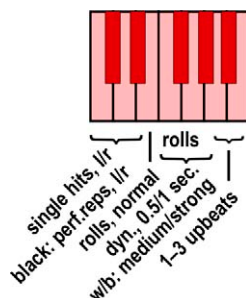
02 Co-Toms_low_perf-rep_dyn9   **Range: C1–A7**   **Samples: 378**   **RAM: 23 MB**   **Level 2**

Low Concert Toms 1–7
Performance repetitions
Dynamics medium and strong
9 repetitions
1 velocity layer

> **Mapping:**
>
> C, D: medium crescendo, pp–mp/mp–ff
> E, F: medium diminuendo, ff–mp/mp–pp
> G: Strong crescendo, pp–ff
> A: Strong diminuendo, ff–pp
> Each Tom spans one octave

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03 Co-Toms_high   **Range: C2–B7**   **Samples: 540**   **RAM: 33 MB**   **Level 2**

High Concert Toms 1–6
Single hits (2 alternations)
Performance repetitions
Rolls normal and crescendo
1–3 upbeats
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, upbeats, and normal rolls, 4 layers
Release samples
2 Alternations

> **Mapping:**
>
> C, D: Single hits, l/r
> C#, D#: performance repetitions, alternating (lower key left hand, higher key right hand)
> E: Rolls, normal
> F–G#: Rolls, strong and medium crescendo, 0.5 and 1 sec. (strong dyn. on black keys)
> A–B: 1–3 upbeats
> Each Tom spans one octave
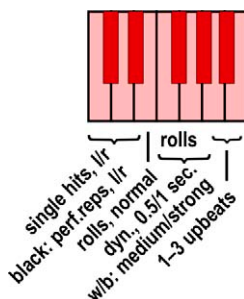
04 Co-Toms_high_perf-rep_dyn9   Range: C2–A7   Samples: 324   RAM: 20 MB   **Level 2**

High Concert Toms 1–6
Performance repetitions
Dynamics medium and strong
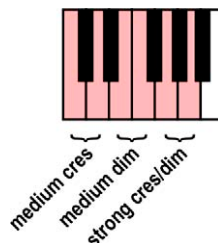9 repetitions
1 velocity layer

Mapping:

C, D: medium crescendo, pp–mp/mp–ff
E, F: medium diminuendo, ff–mp/mp–pp
G: Strong crescendo, pp–ff
A: Strong diminuendo, ff–pp
Each Tom spans one octave
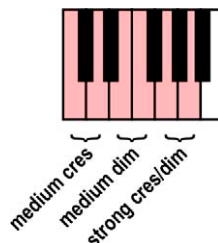
11 ROTO TOMS

Level 2: Normal and soft mallets
Single hits, rim hits, rolls normal and dynamics, upbeats
Performance repetitions

01 Ro-Toms   Range: C3–A#7   Samples: 310   RAM: 19 MB   **Level 2**

Roto Toms 1–5
Single hits (2 alternations)
Rim hits
Rolls normal and dynamics
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Rim hits, 1 layer
Normal rolls, 4 layers
Release samples
2 Alternations
AB switch: crescendo/diminuendo

Mapping:

C, D: Single hits, l/r
C#, D#: Rim hits
E: Rolls, normal
F–A#: Rolls, strong and medium dynamics, 1, 2, and 4 sec. (AB switch, strong dyn. on black keys)
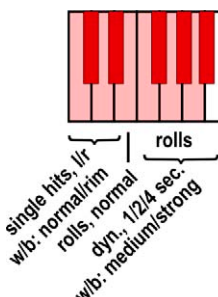
02 Ro-Toms_perf-rep   **Range: C3–D7**   **Samples: 160**   **RAM: 10 MB**   **Level 2**

Roto Toms 1–5
Performance repetitions
4 velocity layers

Mapping:

C, D: performance repetitions, alternating (lower key left hand, higher key right hand)
Each Tom on one octave

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03 Ro-Toms_SO   **Range: C3–E7**   **Samples: 120**   **RAM: 7 MB**   **Level 2**

Roto Toms 1–5: Soft mallets
Single hits (2 alternations)
Rolls
4 velocity layers
Release samples
2 Alternations

Mapping:

C, D: Single hits, l/r
E: Rolls, normal
Each Tom on one octave

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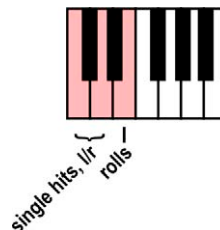
04 Ro-Toms_SO_perf-rep   **Range: C3–D7**   **Samples: 160**   **RAM: 10 MB**   **Level 2**

Roto Toms 1–5: Soft mallets
Performance repetitions
4 velocity layers

Mapping:

C, D: performance repetitions, alternating (lower key left hand, higher key right hand)
Each Tom on one octave
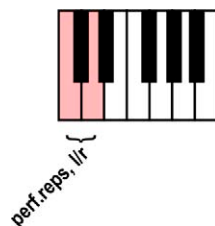
12 TAMBURIN - A

Level 1: Single hits, performance repetitions, upbeats, tremolo normal and crescendo
Level 2: Performance repetitions, medium and strong dynamics, fast and presto

01 Tamb-A	**Range: C4–G7**	**Samples: 126**	**RAM: 7 MB**	**Level 1**

Tambourine A
Single hits
Performance repetitions (120/240 BPM)
Upbeats
Tremolo normal and crescendo
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, 4 layers
Upbeats, 7 layers: 0–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Tremolo, 3 layers
Thumb tremolo, 4 layers: 0–35 pppp, 36–55 pp, 56–88 mp, 89–127 mf
Release samples

> **Mapping:**
> C4–D#4: Single hits, l/r (middle on white keys, rim on black keys)
> F4–B4: performance repetitions, slow/fast, alternating (lower key left hand, higher key right hand)
> C6–E6: 1–3 upbeats
> C7: tremolo, normal
> C#7: thumb tremolo
> F7–G7: tremolo crescendo, 2 and 4 sec.
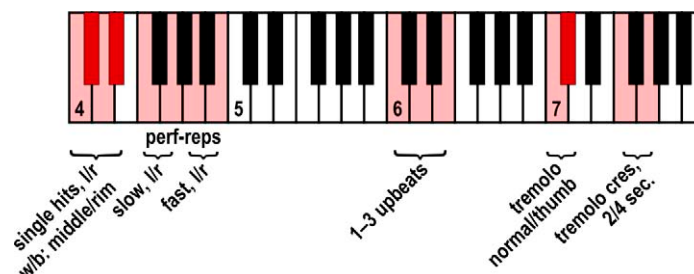
02 Tamb-A_perf-rep_dyn9	**Range: C4–A5**	**Samples: 108**	**RAM: 6 MB**	**Level 2**

Performance repetitions
Dynamics medium and strong
Slow and fast (120/240 BPM)
9 repetitions
1 velocity layer

> **Mapping:**
> C4–A4 – slow repetitions; C5–A5 – fast repetitions
> C, D: medium crescendo
> E, F: medium diminuendo
> G: Strong crescendo
> A: Strong diminuendo
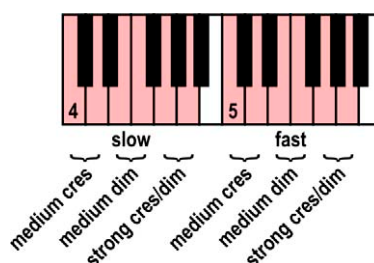
13 TAMBURIN - B

Level 2: Single hits normal and sforzato
Medium and fast upbeats
Shakes and thumb tremolo

01 Tamb-B	**Samples: 48**	**RAM: 3 MB**	**Level 2**

Tambourine B
Single hits normal and sforzato
Medium and fast upbeats (105/130 BPM)
Shakes and thumb tremolo normal and dynamics
Velocity mapping:
Normal single hits, 4 layers
Upbeats, 3 layers
All others, 1 layer
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4, D4: Single hits, normal
C#4, D#4: Single hits, sforzato
C5–F5: 1–4 upbeats, medium (105 BPM)
C6–F6: 1–4 upbeats, fast (130 BPM)
C7–C#7: Shakes long/short
D7–E7: Shakes dynamics, short/long (AB switch)
G7–G#7: thumb tremolo long/short
A7–B7: thumb tremolo dynamics, short/long (AB switch)
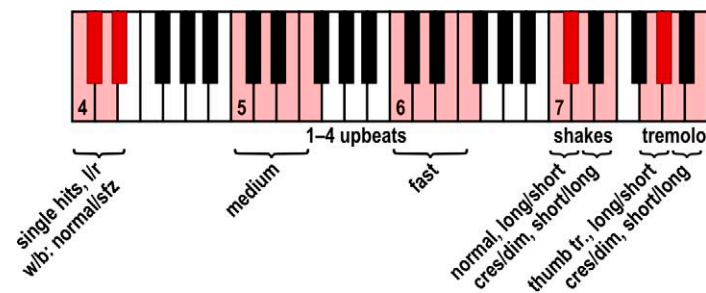
14 TAMBURIN - C

Level 2: Single hits normal and sforzato
Medium and fast upbeats
Shakes and thumb tremolo

01 Tamb-C   Samples: 48   RAM: 3 MB   Level 2

Tambourine C
Single hits normal and sforzato
Medium and fast upbeats (105/130 BPM)
Shakes and thumb tremolo normal and dynamics
Velocity mapping:
Normal single hits, 4 layers
Upbeats, 3 layers
All others, 1 layer
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4, D4: Single hits, normal
C#4, D#4: Single hits, sforzato
C5–F5: 1–4 upbeats, medium (105 BPM)
C6–F6: 1–4 upbeats, fast (130 BPM)
C7–C#7: Shakes long/short
D7–E7: Shakes dynamics, short/long (AB switch)
G7–G#7: thumb tremolo long/short
A7–B7: thumb tremolo dynamics, short/long (AB switch)
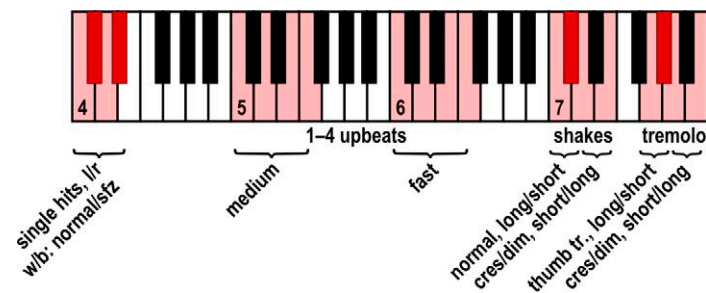
15 TAMBURIN - D

Level 2: Single hits normal and sforzato
Medium and fast upbeats
Shakes and thumb tremolo

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01 Tamb-D   **Samples: 48**   **RAM: 3 MB**   **Level 2**

Tambourine D
Single hits normal and sforzato
Medium and fast upbeats (105/130 BPM)
Shakes and thumb tremolo normal and dynamics
Velocity mapping:
Normal single hits, 4 layers
Upbeats, 3 layers
All others, 1 layer
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4, D4: Single hits, normal
C#4, D#4: Single hits, sforzato
C5–F5: 1–4 upbeats, medium (105 BPM)
C6–F6: 1–4 upbeats, fast (130 BPM)
C7–C#7: Shakes long/short
D7–E7: Shakes dynamics, short/long (AB switch)
G7–G#7: thumb tremolo long/short
A7–B7: thumb tremolo dynamics, short/long (AB switch)
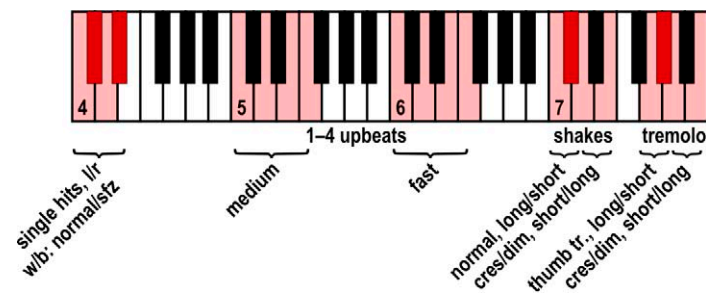
Matrices

Matrix - LEVEL 1

L1 01 Snare drum-A   Samples: 539   RAM: 33 MB   Level 1

Patches:
01 Snare-A_on
03 Snare-A_off

Matrix switches: Vertical: Modwheel, 2 zones

|	H1
V1	01 Snare-A_on
V2	03 Snare-A_off

L1 02 Snare drum ensemble-4   Samples: 474   RAM: 29 MB   Level 1

Patches:
01 Snares-4_on
03 Snares-4_off

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	01 Snares-4_on
V2	03 Snares-4_off

L1 03 Field drum-A   Samples: 216   RAM: 13 MB   Level 1

Patches:
01 Field-A_on
03 Field-A_off

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	01 Field-A_on
V2	03 Field-A_off

L1 04 Bass drum-A   Samples: 340   RAM: 21 MB   Level 1

Patches:
01 B_Drum-A_SO (soft mallets)
03 B_Drum-A_HA (hard mallets)

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	01 B_Drum-A_SO
V2	03 B_Drum-A_HA

L1 05 Taiko drums   Samples: 474   RAM: 29 MB   Level 1

Patch: 01 Taikos

L1 06 Tamburin-A   Samples: 133   RAM: 8 MB   Level 1

Patch: 01 Tamb-A

Matrix - LEVEL 2

01 Snare drum-A all   Samples: 809   RAM: 50 MB   Level 2

Single hits, rolls etc.
Performance repetitions dynamics
Snare on and off

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
snare on	01 Snare-A_on	perf.rep. dynamics
snare off	03 Snare-A_off	perf.rep. dynamics

02 Snare drum-B all   Samples: 572   RAM: 35 MB   Level 2

Single hits, rolls etc.
Performance repetitions dynamics
Snare on and off

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
snare on	01 Snare-B_on	perf.rep. dynamics
snare off	03 Snare-B_off	perf.rep. dynamics

03 Snare drum ensemble-4 all   Samples: 622   RAM: 38 MB   Level 2

Single hits, rolls etc., snare on and off
Performance repetitions dynamics
Brushes and mallets

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	01 Snares-4_on	perf.rep. dynamics	04 Snares-4_Brush	05 Snares-4_Tmp
V2	03 Snares-4_off	%	%	%

04 Piccolo drum all   Samples: 274   RAM: 17 MB   Level 2

Single hits, rolls etc.
Performance repetitions dynamics

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Piccolo-Drum	perf.rep. dynamics

05 Field drum-A all   Samples: 216   RAM: 13 MB   Level 2

Patches:
01 Field-A_on
03 Field-A_off

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	01 Field-A_on
V2	03 Field-A_off

06 Field drum-B all   **Samples: 245**   **RAM: 15 MB**   **Level 2**

Single hits, rolls etc.
Performance repetitions dynamics

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Field-B_on	perf.rep. dynamics

07 Bass drum-A all   **Samples: 448**   **RAM: 28 MB**   **Level 2**

Single hits, rolls etc.
Performance repetitions dynamics
Soft and hard mallets

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
soft mallets	01 B-Drum-A_SO	perf.rep. dynamics
hard mallets	03 B-Drum-A_HA	perf.rep. dynamics

08 Bass drum-B all   **Samples: 206**   **RAM: 12 MB**   **Level 2**

Single hits, rolls etc.
Performance repetitions dynamics

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 B-Drum-B	perf.rep. dynamics

09 Taiko drums all   **Samples: 718**   **RAM: 44 MB**   **Level 2**

Single hits, rolls etc.
Performance repetitions
Effects

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Taikos	perf. repetitions	03 Taikos_FX

10 Concert toms all   **Samples: 1872** **RAM: 117 MB**   **Level 2**

Concert toms low and high
Single hits, rolls etc.
Performance repetitions dynamics

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
low toms	01 Co-Toms_low	perf.rep. dynamics
high toms	03 Co-Toms_high	perf.rep. dynamics

11 Roto toms all   **Samples: 750**   **RAM: 46 MB**   **Level 2**

Single hits, rolls etc.
Performance repetitions
Normal and hard mallets

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
normal mallets	01 Ro-Toms	perf.rep. dynamics
soft mallets	03 Ro-Toms_SO	perf.rep. dynamics

12 Tamburin-A all   **Samples: 241**   **RAM: 15 MB**   **Level 2**

Single hits, tremolos etc.
Performance repetitions dynamics

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Tamb-A	perf.rep. dynamics

13 Tamburin-B all   **Samples: 48**   **RAM: 3 MB**   **Level 2**
Patch: 01 Tamb-B

14 Tamburin-C all   **Samples: 48**   **RAM: 3 MB**   **Level 2**
Patch: 01 Tamb-C

15 Tamburin-D all   **Samples: 48**   **RAM: 3 MB**   **Level 2**
Patch: 01 Tamb-D

Presets

Drums VSL Preset Level 1   **Samples: 2176** **RAM: 136 MB** **Level 1**

Matrices:
L1 01 Snare drum-A
L1 02 Snare drum ensemble-4
L1 03 Field drum-A
L1 04 Bass drum-A
L1 05 Taiko drums
L1 06 Tamburin-A
Keyswitches: C1–F1

Drums VSL Preset Level 2   **Samples: 5676** **RAM: 354 MB** **Level 2**

Matrices:
01 Snare drum-A all
03 Snare drum ensemble-4
05 Field drum-A all
07 Bass drum-A all
09 Taiko drums all
10 Concert toms all
11 Roto toms all
12 Tamburin-A all
Keyswitches: E1–B1

83 Cymbals - Gongs

Cymbals

Nowadays the orchestral cymbal family consists of the pair (piatti), the suspended cymbal and the small antique cymbals.

The **pair of cymbals** is used especially to accentuate musical climaxes and from the Romantic period it has played an important role in the orchestra. Its powerful sound can rise above the entire orchestra. It is sounded by striking one plate against the other.

Suspended cymbals are struck with a stick or mallet. In the orchestra the standard instrument is the **Turkish cymbal**, which is used especially to create tension. The Chinese cymbal was introduced to the orchestra in the 20th century due to its exotic sound.

Gongs

The **gong** is the metal percussion instrument that provides melodies and an exotic flavor in that section. The gong is often confused with the **tam-tam**, but there is a number of significant differences between the construction and the sound of the two instruments: unlike the tam-tam the gong has a definite pitch. Apart from that the tam-tam is a relatively flat disc, whereas the gong has a knob in the center.

Patches

01 PIATTI - A

Level 1: Normal and slow hits
Damped fast and slow
Performance repetitions

01 Piatti-A_Single-Hits	Range: C3–C5	Samples: 80	RAM: 5 MB	Level 1

Single hits, damped fast and slow
Normal and slow hits
Performance repetitions
8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Release samples

Mapping:
C3–D3: Single hits, damped fast
F3–G3: Single hits, damped slow
C4–D4: Single hits, normal
F4–G4: Single hits, slow
C5: performance repetitions (3 reps.)
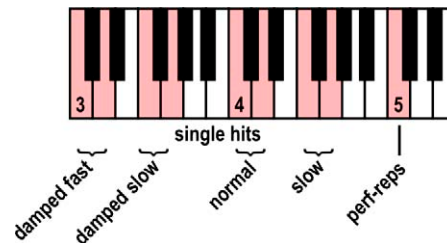
02 PIATTI - series B

Level 1: 13", 18", 20" and 22" cymbals
Muted and open hits, scrapes
Level 2: 11", 15", 16" and 20" cymbals
Muted and open hits, scrapes

01 Piatti-B_11Z-Chi (13Z-Za/15Z-Za/16Z-K)	Range: C3–C4	Samples: 15	RAM: 1 MB	Level 2

Cymbals: Chinese, 11"; Zildijan Avedis, 13" and 15"; Avedis K1, 16"
Muted and open hits
5 velocity layers

Mapping:
C3: muted, var. 1 (shorter)
D3: muted, var. 2 (longer)
C4: open

05 Piatti-B_16Z-K2 (18Z-ls/20Z-ls/20Z-Za/22Z-Za)   **Range: C3–F4   Samples: 20 RAM: 1 MB**

<div align="center">Level 2</div>

Cymbals: Avedis K2, 16"; Istanbul Janissary, 18"; Istanbul Symphonic, 20"; Zildijan Avedis, 20" and 22"
Muted and open hits,
scrapes
5 velocity layers

> **Mapping:**
> C3: muted, var. 1 (shorter)
> D3: muted, var. 2 (longer)
> C4: open
> F4: Scraped
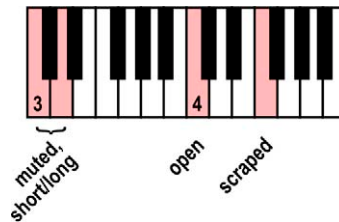
03 CYMBAL standard - A

Level 1: Drumsticks and mallets
Single hits normal and damped
Performance repetitions,
Tremolo normal and dynamics

01 Cym-A_Stick   **Range: C4–A#6   Samples: 103   RAM: 6 MB**   **Level 1**

Single hits, normal and damped
Performance repetitions
Tremolo normal (AB switch: long and short release) and dynamics
8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Release samples
AB switch: crescendo/diminuendo
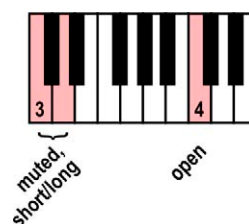
> **Mapping:**
> C4–D4: Single hits, normal
> F4–G4: Single hits, damped (shorter)
> A4–B4: Single hits, damped (longer)
> C5: performance repetitions (3 reps.)
> C6: tremolo, normal
> D#6–A#6: medium and strong crescendo, 1, 2, and 4 sec. (strong crescendo on black keys)
> A6–A#6: medium and strong dynamics, 8 sec. (AB switch, strong dynamics on black key)

02 Cym-A_Mallet   Range: C4–A#6   Samples: 119   RAM: 7 MB   **Level 1**

Single hits, soft and hard mallets
Damped
Performance repetitions
Tremolo normal (AB switch: long and short release) and dynamics
8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4–D4: Single hits, soft mallets
C#4–D#4: Single hits, hard mallets
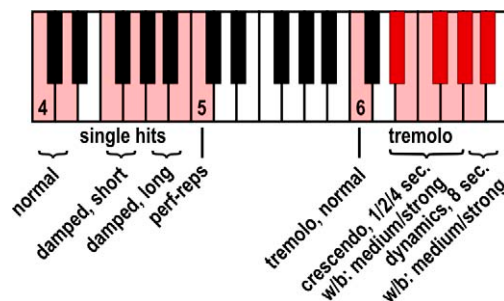F4–G4: Single hits, damped (shorter)
A4–B4: Single hits, damped (longer)
C5: performance repetitions (3 reps.)
C6: tremolo, normal
D#6–A#6: medium and strong crescendo, 1, 2, and 4 sec. (strong crescendo on black keys)
A6–A#6: medium and strong dynamics, 8 sec. (AB switch, strong dynamics on black key)
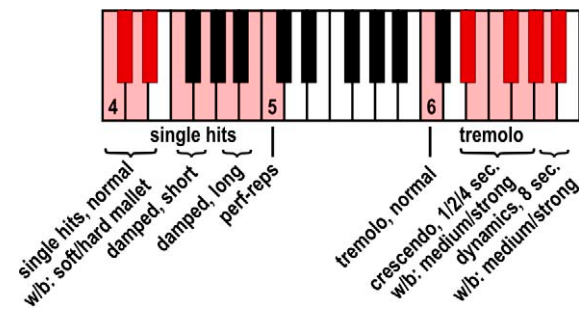
O4 CYMBAL standard - B

Level 2: Drumsticks, wool mallets, metal rod, brushes
Single hits normal and damped
Tremolo normal and dynamics

---

01 Cym-B_Stick (Mallet)   Range: C4–A#6   Samples: 33   RAM: 2 MB   Level 2

01 Wood sticks/02 Wool mallets
Single hits, normal and damped
Tremolo normal (AB switch: long and short release) and dynamics
3 velocity layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4–D4: Single hits, normal
F4–G4: Single hits, damped
C6: tremolo, normal
F#6: Strong dynamics, 2 sec.
G6–A#6: medium and strong dynamics, 4 and 8 sec. (AB switch, strong dynamics on black keys)

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03 Cym-B_Metal   Range: C4–A#6   Samples: 36   RAM: 2 MB   Level 2

Metal rod
Single hits, normal and damped
Tremolo normal (AB switch: long and short release) and dynamics
3 velocity layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4–D4: Single hits, normal
F4–G4: Single hits, damped
C6: tremolo, normal
F6–A#6: medium and strong dynamics, 2, 4, and 8 sec. (AB switch, strong dynamics on black keys; dim only 2 and 8 sec.)

04 Cym-B_Brush   Range: C4–A6   Samples: 18   RAM: 1 MB   **Level 2**

Brushes
Single hits, normal and damped
Tremolo normal (AB switch: long and short release) and dynamics
2 velocity layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4–D4: Single hits, normal
F4–G4: Single hits, damped
C6: tremolo, normal
F6–A6: Strong dynamics, 2, 4, and 8 sec. (AB switch; dim only 2 and 8 sec.)

05 CYMBAL standard - C

Level 2: Drumsticks, wool mallets, metal rod
Single hits normal and damped
Tremolo normal and dynamics

01 Cym-C_Stick (Mallet/Metal)   Range: C4–A#6   Samples: 36   RAM: 2 MB   **Level 2**

01 Wood sticks/02 Wool mallets/03 Metal mallets
Single hits, normal and damped
Tremolo normal (AB switch: long and short release) and dynamics
3 velocity layers
Release samples
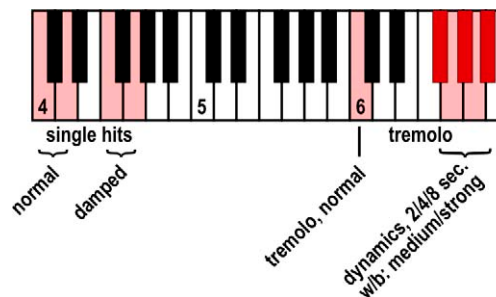AB switch: crescendo/diminuendo

Mapping:
C4–D4: Single hits, normal
F4–G4: Single hits, damped
C6: tremolo, normal
F6–A#6: medium and strong dynamics, 2, 4, and 8 sec. (AB switch, strong dynamics on black keys; dim only 2 and 8 sec.)
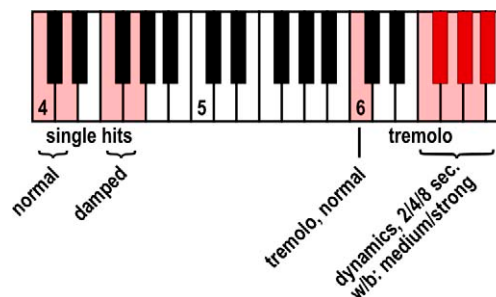
06 CYMBAL standard - D   Range: C4–A#6

Level 2: Drumsticks, woll mallets, metal rod, brushes
Single hits normal and damped
Tremolo normal and dynamics

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01 Cym-D_Stick (Mallet/Metal)   Samples: 36   RAM: 2 MB   Level 2

01 Wood sticks/02 Wool mallets/03 Metal mallets
Single hits, normal and damped
Tremolo normal (AB switch: long and short release) and dynamics
3 velocity layers
Release samples
AB switch: crescendo/diminuendo

> **Mapping:**
> C4–D4: Single hits, normal
> F4–G4: Single hits, damped
> C6: tremolo, normal
> F6–A#6: medium and strong dynamics, 2, 4, and 8 sec. (AB switch, strong dynamics on black keys; dim only 2 and 8 sec.)

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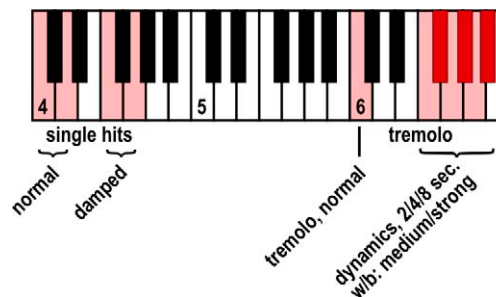
04 Cym-D_Brush   Range: C4–A6   Samples: 19   RAM: 1 MB   Level 2

Brushes
Single hits, normal and damped
Tremolo normal (AB switch: long and short release) and dynamics
2 velocity layers
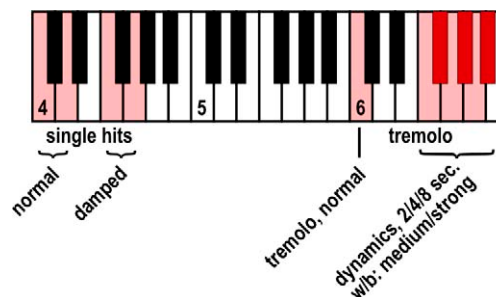Release samples
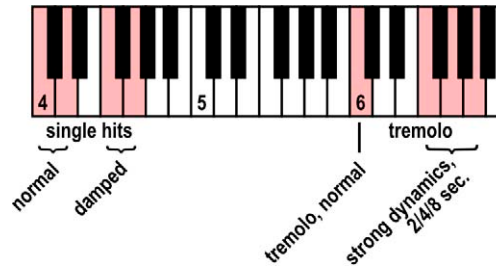AB switch: crescendo/diminuendo

> **Mapping:**
> C4–D4: Single hits, normal
> F4–G4: Single hits, damped
> C6: tremolo, normal
> F6–A6: Strong dynamics, 2, 4, and 8 sec. (AB switch; dim only 2 and 8 sec.)

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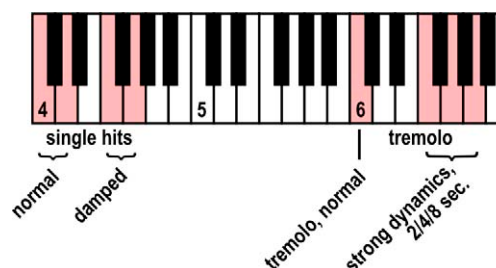
07 CYMBAL Crash

Level 2: 15" and 16" crash cymbals
Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed
Rim, middle and dome hits, normal and damped

01 Cym-Crash_15Z_Stick (Mallet/Tmp)   Range: C3–B5   Samples: 105   RAM: 6 MB   **Level 2**

01 Wood sticks/02 Mallet/03 Timpani mallet
Rim, middle, and dome hits
Normal and damped
5 velocity layers

Mapping:
C3–B3 – rim hits
C4–B4 – body hits
C5–B5 – dome hits
C–E: Normal/hard/soft attack
F–G: muted, short
A–B: muted, long

04 Cym-Crash_15Z_Brush   Range: C4–B4   Samples: 7   RAM: 1 MB   **Level 2**

Brushes: Normal hit, rubs, and muted hits
1 velocity layer

Mapping:
C4: Single hit, normal
C#4–D#4: Rubs, var. 1/2
F4–G4: muted, short
A4–B4: muted, long
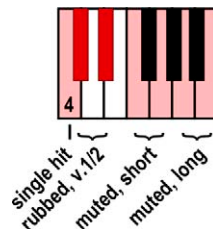
05 Cym-Crash_15Z_Rod   Range: C4–B4   Samples: 6   RAM: 1 MB   **Level 2**

Metal rod: Normal hit, rub, and muted hits
1 velocity layer

Mapping:

C4: Single hit, normal
C#4: Rub
F4–G4: muted, short
A4–B4: muted, long

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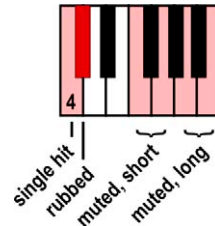
06 Cym-Crash_15Z_Bow   Range: C4–A4   Samples: 6   RAM: 1 MB   **Level 2**

Bowed, variations 1–6
1 velocity layer

Mapping:

C4–A4: bowed, var. 1–6

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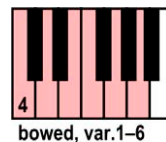
11 Cym-Crash_16Z_Stick (Mallet/Tmp)   Range: C3–B5   Samples: 105   RAM: 6 MB   **Level 2**

11 Wood sticks/12 Mallet/13 Timpani mallet
Rim, middle, and dome hits
Normal and damped
5 velocity layers

Mapping:

C3–B3 – rim hits
C4–B4 – body hits
C5–B5 – dome hits
C–E: Normal/hard/soft attack
F–G: muted, short
A–B: muted, long
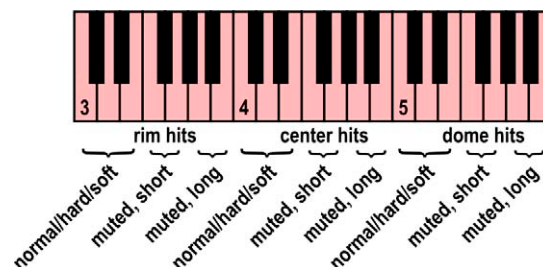
14 Cym-Crash_16Z_Brush Range: C3–C5 Samples: 9 RAM: 1 MB **Level 2**

Brushes: Rim, middle, and dome hits
Middle rubs
1 velocity layer

Mapping:
Rim:
C3: Single hit, normal
D3–E3: muted, short/long
Body:
C4: Single hit, normal
C#4–D#4: Rubs
D4–E4: muted, short/long
Dome:
C5: Single hit, normal
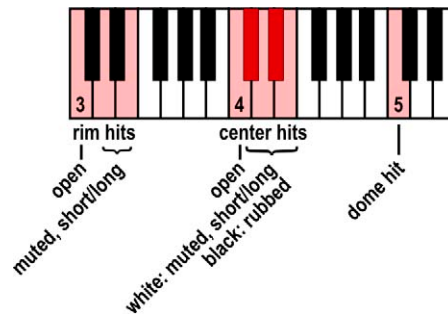
15 Cym-Crash_16Z_Rod Range: C3–C5 Samples: 8 RAM: 1 MB **Level 2**

Metal rod: Rim, middle, and dome hits
Middle rub
1 velocity layer

Mapping:
Rim:
C3: Single hit, normal
D3–E3: muted, short/long
Body:
C4: Single hit, normal
C#4: Rub
D4–E4: muted, short/long
Dome:
C5: Single hit, normal
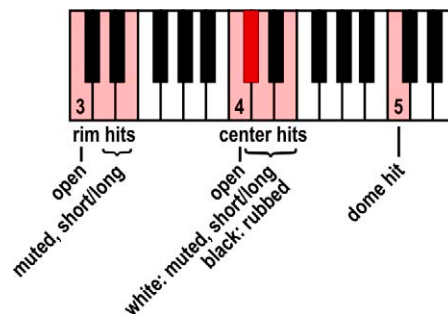
16 Cym-Crash_16Z_Bow Range: C4–F4 Samples: 4 RAM: 1 MB **Level 2**

Bowed, variations 1–4
1 velocity layer

Mapping:
C4–F4: bowed, var. 1–4

bowed, var.1–4
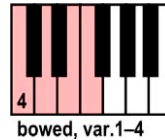
08 CYMBAL China

Level 2: 18" and 22" Chinese cymbals
Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed
Rim and middle hits, normal and damped

01 Cym-China_18Z_Stick (Mallet/Tmp)   Range: C3–B4   Samples: 70   RAM: 4 MB   Level 2

01 Wood sticks/02 Mallet/03 Timpani mallet
Rim and middle hits
Normal and damped
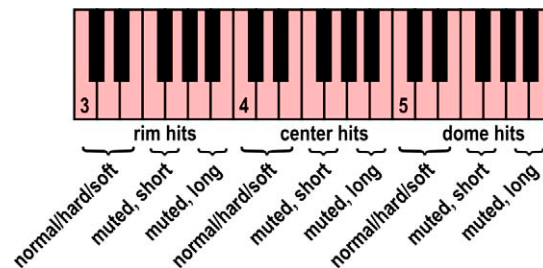5 velocity layers

    Mapping:
    C3–B3 – rim hits
    C4–B4 – body hits
    C–E: Normal/hard/soft attack
    F–G: muted, short
    A–B: muted, long
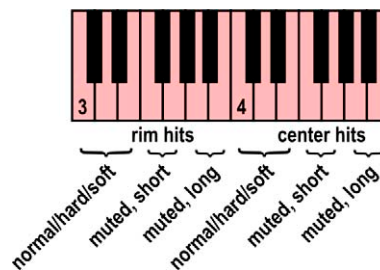
04 Cym-China_18Z_Brush   Range: C4–G4   Samples: 6   RAM: 1 MB   Level 2

Brushes: Normal hits, rubs, and muted hits
1 velocity layer

    Mapping:
    C4–D4: Single hits, normal
    C#4–D#4: Rubs, var. 1/2
    F4: muted, short
    G4: muted, long
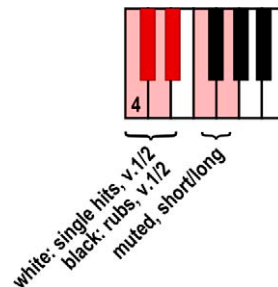
| **05 Cym-China_18Z_Rod** | **Range: C4–G4** | **Samples: 4** | **RAM: 1 MB** | **Level 2** |

Metal rod: Normal hit, rub, and muted hits
1 velocity layer

Mapping:
C4: Single hit, normal
C#4: Rub
F4: muted, short
G4: muted, long
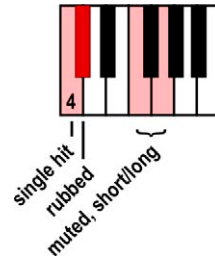
| **06 Cym-China_18Z_Bow** | **Range: C4–F4** | **Samples: 4** | **RAM: 1 MB** | **Level 2** |

Bowed, variations 1–4
1 velocity layer

Mapping:
C4–F4: bowed, var. 1–4
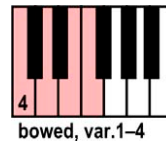
| **11 Cym-China_22Z_Stick (Mallet/Tmp)** | **Range: C3–B4** | **Samples: 69** | **RAM: 4 MB** | **Level 2** |

11 Wood sticks/12 Mallet/13 Timpani mallet
Rim and middle hits
Normal and damped
5 velocity layers

Mapping:
C3–B3 – rim hits
C4–B4 – body hits
C–E: Normal/hard/soft attack
F–B: muted, var. 1–4
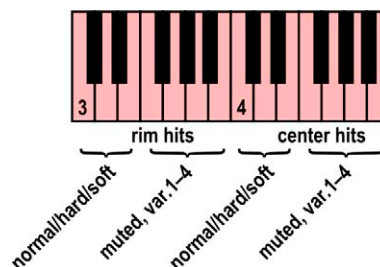
14 Cym-China_22Z_Brush   Range: C4–G4   Samples: 4   RAM: 1 MB   Level 2

Brushes: Normal hit, rub, and muted hits
1 velocity layer

Mapping:
C4: Single hit, normal
C#4: Rub
F4–G4: muted, var. 1/2

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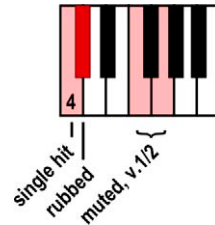
15 Cym-China_22Z_Rod   Range: C4–G4   Samples: 4   RAM: 1 MB   Level 2

Metal rod: Normal hit, rub, and muted hits
1 velocity layer

Mapping:
C4: Single hit, normal
C#4: Rub
F4–G4: muted, var. 1/2

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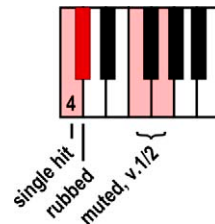
16 Cym-China_22Z_Bow   Range: C4–G4   Samples: 5   RAM: 1 MB   Level 2

Bowed, variations 1–5
1 velocity layer

Mapping:
C4–G4: bowed, var. 1–5

bowed, var.1–5
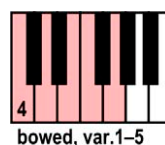
09 CYMBAL Ride

Level 2: 20" and 22" ride cymbals
Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed
Rim, middle and dome hits, normal and damped

01 Cym-Ride_2OZ_Stick (Mallet/Tmp)   Range: C3–B5   Samples: 101   RAM: 6 MB   **Level 2**

01 Wood sticks/02 Mallet/03 Timpani mallet
Rim, middle, and dome hits
Normal and damped
5 velocity layers

Mapping:
C3–B3 – rim hits
C4–B4 – body hits
C5–B5 – dome hits
C–E: Normal/hard/soft attack
F–G: muted, short
A–B: muted, long
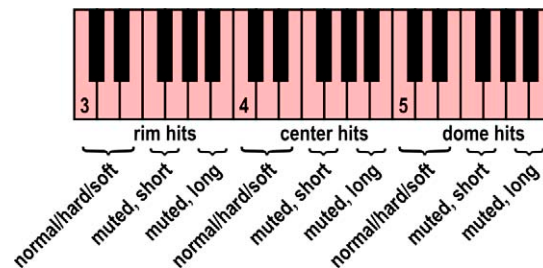
04 Cym-Ride_2OZ_Brush   Range: C4–G4   Samples: 4   RAM: 1 MB   **Level 2**

Brushes: Normal hit, rub, and muted hits
1 velocity layer

Mapping:
C4: Single hit, normal
C#4: Rub
F4–G4: muted, short/long
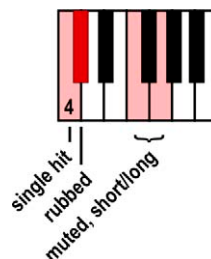
| **05 Cym-Ride_2OZ_Rod** | **Range: C4–G4** | **Samples: 4** | **RAM: 1 MB** | **Level 2** |

Metal rod: Normal hit, rub, and muted hits
1 velocity layer

Mapping:
C4: Single hit, normal
C#4: Rub
F4–G4: muted, short/long
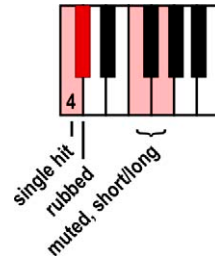
| **06 Cym-Ride_2OZ_Bow** | **Range: C4–F4** | **Samples: 4** | **RAM: 1 MB** | **Level 2** |

Bowed, variations 1–4
1 velocity layer

Mapping:
C4–F4: bowed, var. 1–4
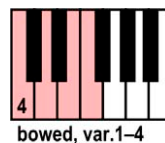
| **11 Cym-Ride_22Z_Stick (Mallet/Tmp)** | **Range: C3–B5** | **Samples: 105** | **RAM: 6 MB** | **Level 2** |

11 Wood sticks/12 Mallet/13 Timpani mallet
Rim, middle, and dome hits
Normal and damped
5 velocity layers

Mapping:
C3–B3 – rim hits
C4–B4 – body hits
C5–B5 – dome hits
C–E: Normal/hard/soft attack
F–G: muted, short
A–B: muted, long
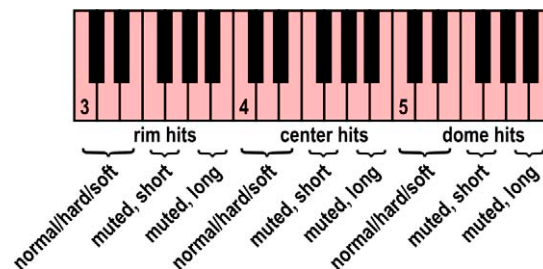
14 Cym-Ride_22Z_Brush   Range: C3–G5   Samples: 11   RAM: 1 MB   **Level 2**

Brushes: Rim, middle, and dome hits
Middle rubs
1 velocity layer

Mapping:
Rim:
C3: Single hit, normal
F3–G3: muted, short/long
Body:
C4: Single hit, normal
C#4–D#4: Rubs
F4–G4: muted, short/long
Dome:
C5: Single hit, normal
F5–G5: muted, short/long
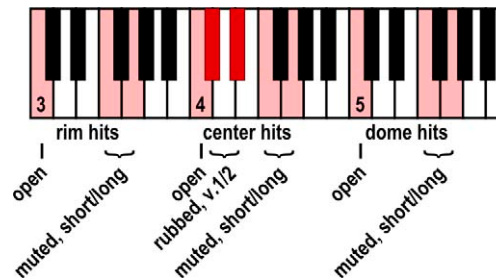
15 Cym-Ride_22Z_Rod   Range: C3–G5   Samples: 10   RAM: 1 MB   **Level 2**

Metal rod: Rim, middle, and dome hits
Middle rub
1 velocity layer

Mapping:
Rim:
C3: Single hit, normal
F3–G3: muted, short/long
Body:
C4: Single hit, normal
C#4: Rub
F4–G4: muted, short/long
Dome:
C5: Single hit, normal
F5–G5: muted, short/long
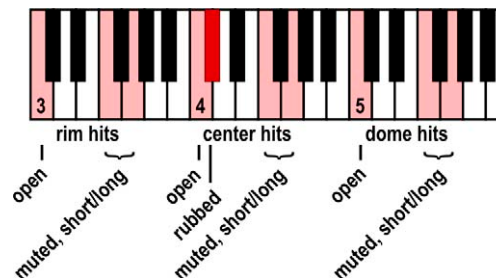
16 Cym-Ride_22Z_Bow **Range: C4–C5** **Samples: 8** **RAM: 1 MB** **Level 2**

Bowed, variations 1–8
1 velocity layer

Mapping:
C4–C5: bowed, var. 1–8

bowed, var.1–8

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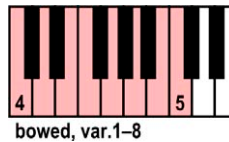
10 CYMBAL Splash

Level 2: 6", 8", and 12" splash cymbals
Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed
Rim, middle and dome hits, normal and damped

01 Cym-Splash_6Z_Stick **Range: C4–B4** **Samples: 35** **RAM: 2 MB** **Level 2**

Wood sticks: Single hits, normal, hard, and soft attack
Damped, var. 1–4
5 velocity layers

Mapping:
Rim hits:
C4–E4: Single hits, normal/hard/soft attack
F4–B4: muted, var. 1–4

rim hits

normal/hard/soft   muted, var.1–4
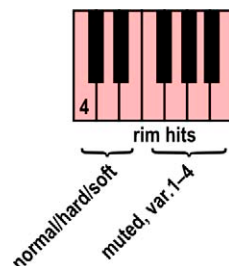
02 Cym-Splash_6Z_Mallet (Tmp) **Range: C4–B4** **Samples: 35** **RAM: 2 MB** **Level 2**

02 Mallet/03 Timpani mallet
Single hits, normal, hard, and soft attack
Damped, short and long
5 velocity layers

Mapping:
Rim hits:
C4–E4: Single hits, normal/hard/soft attack
F4–G4: muted, short
A4–B4: muted, long

rim hits

normal/hard/soft   muted, short   muted, long
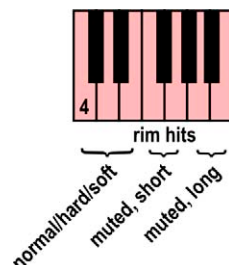
04 Cym-Splash_6Z_Brush (Rod)   **Range: C4–G4**   **Samples: 4**   **RAM: 1 MB**   **Level 2**

04 Brushes/05 Metal rod
Normal and muted hits
1 velocity layer

    Mapping:
    C4–D4: Single hits, normal
    F4–G4: muted, var. 1/2

---
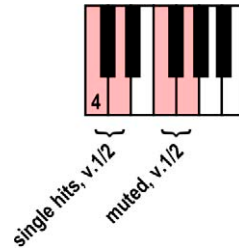
06 Cym-Splash_6Z_Bow   **Range: C4–G4**   **Samples: 5**   **RAM: 1 MB**   **Level 2**

Bowed, variations 1–5
1 velocity layer
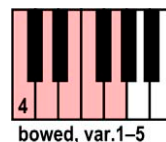
    Mapping:
    C4–G4: bowed, var. 1–5

---

11 Cym-Splash_8Z_Stick   **Range: C3–B4**   **Samples: 70**   **RAM: 4 MB**   **Level 2**

Wood sticks: Rim and middle hits
Normal and damped
5 velocity layers

    Mapping:
   C3–B3 – rim hits
    C4–B4 – body hits
    C–E: Normal/hard/soft attack
    F–G: muted, short
    A–B: muted, long
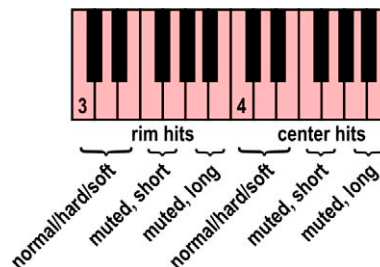
12 Cym-Splash_8Z_Mallet (Tmp)   Range: C4–B4   Samples: 28   RAM: 1 MB   **Level 2**

12 Mallet/13 Timpani mallet
Rim hits, normal, hard, and soft attack
Damped, short and long
4 velocity layers

> **Mapping:**
> Rim hits:
> C4–E4: Single hits, normal/hard/soft attack
> F4–G4: muted, short
> A4–B4: muted, long
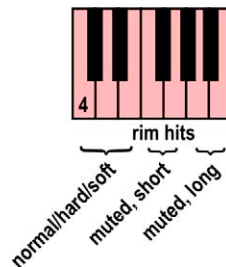
14 Cym-Splash_8Z_Brush (Rod)   Range: C4–G4   Samples: 4   RAM: 1 MB   **Level 2**

14 Brushes/15 Metal rod
Normal and muted hits
1 velocity layer

> **Mapping:**
> C4–D4: Single hits, normal
> F4–G4: muted, var. 1/2
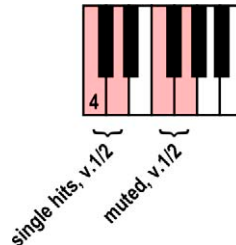
16 Cym-Splash_8Z_Bow   Range: C4–A4   Samples: 6   RAM: 1 MB   **Level 2**

Bowed, variations 1–6
1 velocity layer

> **Mapping:**
> C4–A4: bowed, var. 1–6
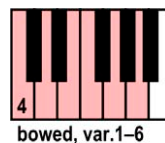
21 Cym-Splash_12Z_Stick (Mallet/Tmp)   Range: C3–B4   Samples: 70   RAM: 4 MB   **Level 2**

21 Wood sticks/22 Mallet/23 Timpani mallet
Rim and dome hits
Normal and damped
5 velocity layers

> **Mapping:**
> C3–B3 – rim hits
> C4–B4 – dome hits
> C–E: Normal/hard/soft attack
> F–B: muted, var. 1–4

---
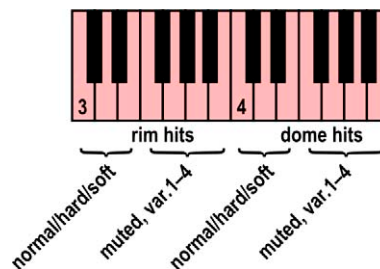
24 Cym-Splash_12Z_Brush (Rod)   Range: C4–C5   Samples: 4   RAM: 1 MB   **Level 2**

24 Brushes/25 Metal rod
Rim hits, normal and damped
Dome hit, normal
1 velocity layer

> **Mapping:**
> C4: rim hit, normal
> F4–G4: rim hits, muted, var. 1–2
> C5: dome hit, normal

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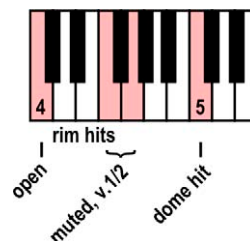
26 Cym-Splash_12Z_Bow   Range: C4–G4   Samples: 5   RAM: 1 MB   **Level 2**

Bowed, var. 1–5
1 velocity layer

> **Mapping:**
> C4–G4: bowed, var. 1–5
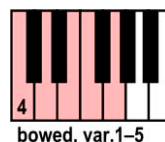
11 FINGER CYMBALS

Level 1: Low and high finger cymbals
Normal and side strokes, rubs

| **01 Finger_cymbals** | **Range: C4–E5** | **Samples: 10** | **RAM: 1 MB** | **Level 1** |

Low and high finger cymbals
Normal strokes, side strokes, and rubs
2 velocity layers

Mapping:
C4–E4 – low cymbals
C5–E5 – high cymbals
C: normal stroke
D: side stroke
E: rub
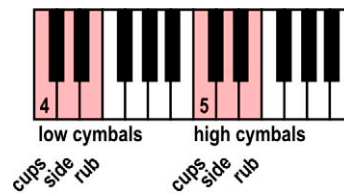
12 TAM - A

Level 1: Single hits, normal and hard sound
Tremolo
Scratches

| **12 TAM-A** | **Range: C4–D6** | **Samples: 39** | **RAM: 2 MB** | **Level 1** |

Tam-tam A: Single hits, normal and hard sound
Tremolo
Scratches
Velocity mapping: Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Tremolo, 4 layers
Scratches, 3 layers

Mapping:
C4–D4: single hits, normal, l/r
F4–G4: single hits, hard sound, l/r
C6: tremolo
D6: long scratch
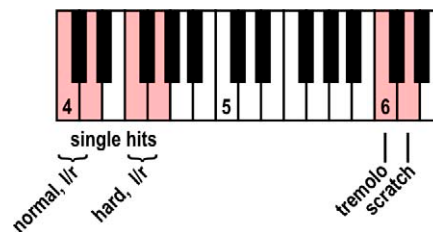
13 TAM - series B

Level 1: 60, 100, 130 cm tam-tams
Various beaters
Single hits and rubs
Level 2: 52, 85, 110 cm tam-tams
Various beaters
Single hits and rubs

| **01 Tam-B_52** | **Range: C4–C5** | **Samples: 7** | **RAM: 1 MB** | **Level 2** |

Tam-tam, 52 cm: Soft felt and metal beaters
Single hits, rub
Velocity mapping: Soft mallet, 4 layers
Metal beater, 2 layers

Mapping:
C4: soft felt mallet (pp–ff)
F4: metal beater
C5: metal beater, sforzato rub
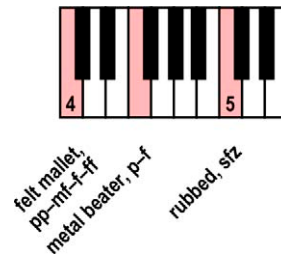
| **02 Tam-B_60** | **Range: C4–C5** | **Samples: 7** | **RAM: 1 MB** | **Level 1** |

Tam-tam, 60 cm: Soft felt and metal beaters
Single hits, rub
Velocity mapping: Soft mallet, 4 layers
Metal beater, 2 layers

Mapping:
C4: soft felt mallet (pp–ff)
F4: metal beater
C5: metal beater, sforzato rub
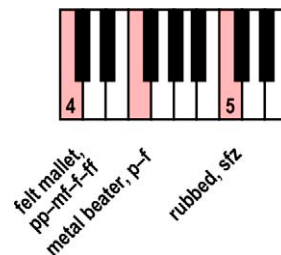
03 Tam-B_85　　　　　　**Range: C3–E5**　　**Samples: 12**　　**RAM: 1 MB**　　**Level 2**

Tam-tam, 85 cm: Various beaters
Single hits, rubs
Velocity mapping: Soft mallet, 4 layers
Metal beater, 2 layers
All others, 1 layer

Mapping:

C3: large metal beater, long rub
sD3: superball, rub crescendo
C4: soft felt mallet (pp–ff)
F4–G4: single hits, metal beaters
C5–D5: metal beater, rub sforzato/long
E5: rub, Sacre stick

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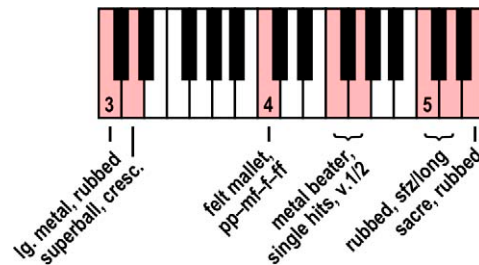
04 Tam-B_100　　　　　　**Range: C3–E5**　　**Samples: 14**　　**RAM: 1 MB**　　**Level 1**

Tam-tam, 100 cm: Various beaters
Single hits
Rubs (AB switch)
Velocity mapping: Soft mallet, 4 layers
Metal beater, 2 layers
All others, 1 layer
Release samples
AB switch: release duration long/short

Mapping:

C3–D3: superball, rub normal/crescendo
C4: soft felt mallet (pp–ff)
F4–G4: single hits, metal beaters
C5–D5: metal beater, rub sforzato/long
E5: rub, Sacre stick
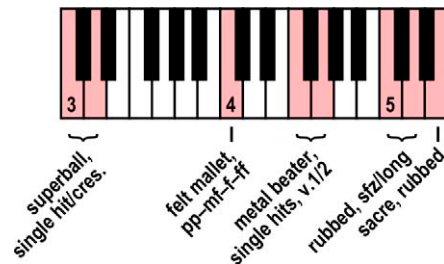
05 Tam-B_110   **Range: C3–E5**   **Samples: 14**   **RAM: 1 MB**   **Level 2**

Tam-tam, 110 cm: Various beaters
Single hits
Rubs (AB switch)
Velocity mapping: Soft mallet, 4 layers
Metal beater, 2 layers
All others, 1 layer
Release samples
AB switch: release duration long/short

Mapping:
C3–D3: superball, rub normal/crescendo
C4: soft felt mallet (pp–ff)
F4–G4: single hits, metal beaters
C5–D5: metal beater, rub sforzato/long
E5: rub, Sacre stick

---
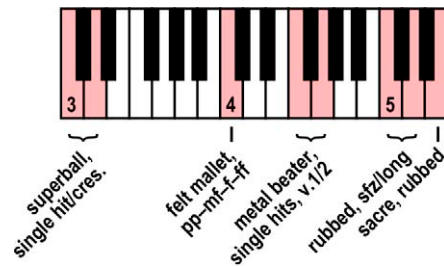
06 Tam-B_130   **Range: C3–E5**   **Samples: 14**   **RAM: 1 MB**   **Level 1**

Tam-tam, 130 cm: Various beaters
Single hits
Rubs (AB switch)
Velocity mapping: Soft mallet, 4 layers
Metal beater, 2 layers
All others, 1 layer
Release samples
AB switch: release duration long/short

Mapping:
C3–D3: superball, rub normal/crescendo
C4: soft felt mallet (pp–ff)
F4–G4: single hits, metal beaters
C5–D5: metal beater, rub sforzato/long
E5: rub, Sacre stick
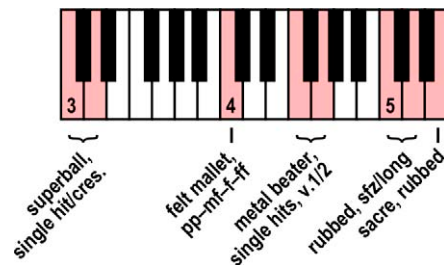
14 TAM - series C

Level 2: 30, 40, 50, 60, 70, 80, 90 cm tam-tams
Single hits normal and surface
Scrapes normal and rotating

---

01 Tam-C_30 (40/50/60)   **Range: C4–F4**   **Samples: 7**   **RAM: 1 MB**   **Level 2**

Tam-tam, 30/40/50/60 cm
Single hits, normal and surface
Velocity mapping: Normal hits, 5 layers
Surface, 2 layers

Mapping:
C4: single hits, normal (p–ff)
F4: surface strokes

single hits,
p–mp–mf–f–ff
surface strokes, p–f

---

05 Tam-C_70 (80/90)   **Range: C3–D5**   **Samples: 21**   **RAM: 1 MB**   **Level 2**

Tam-tam, 70/80/90 cm
Rotating scrapes (AB switch)
Single hits and scrapes
Velocity mapping: Normal hits, 5 layers
Rotating scrapes and triangle beater single hits, 2 layers
Triangle beater scrapes, 1 layer
Release samples
AB switch: release duration long/short

Mapping:
C3–D3: rotating scrape, triangle beater/brushes
C4: single hits, normal (p–ff)
F4: single hits, triangle beater (p/f)
C5–D5: scrapes, triangle beater, middle/rim
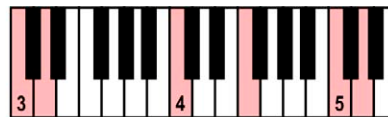
triangle beater/brushes,
rotating scrape

single hits,
p–mp–mf–f–ff
triangle beater,
single hits

triangle beater,
scraped, middle/rim

---

15 GONGS

Level 1: Soft and wood mallets
Single notes
Level 2: Soft and wood mallets, rolls normal and crescendo
Metal mallets and bowed, single notes

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01 Gongs_SO   **Range: C2–A5**   **Samples: 132**   **RAM: 8 MB**   **Level 1**

Soft mallets: Single notes
3 velocity layers

---

02 Gongs_SO_roll   **Range: A2–A4**   **Samples: 120**   **RAM: 7 MB**   **Level 2**

Soft mallets: Rolls
2 velocity layers
Release samples
AB switch: release duration long/short

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03 Gongs_SO_roll-cre   **Range: A2–A4**   **Samples: 20**   **RAM: 1 MB**   **Level 2**

Soft mallets: Rolls, crescendo
1 velocity layer

---

04 Gongs_Wood   **Range: A#2–A5**   **Samples: 32**   **RAM: 2 MB**   **Level 1**

Wood mallets: Single notes
1 velocity layer

---

05 Gongs_Wood_roll   **Range: A2–A4**   **Samples: 60**   **RAM: 3 MB**   **Level 2**

Wood mallets: Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

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06 Gongs_Wood_roll-cre   **Range: A2–A4**   **Samples: 20**   **RAM: 1 MB**   **Level 2**

Wood mallets: Rolls, crescendo
1 velocity layer

---

07 Gongs_Metal   **Range: A2–A5**   **Samples: 32**   **RAM: 2 MB**   **Level 2**

Metal mallets: Single notes
1 velocity layer

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08 Gongs_Bow-1   **Range: A2–A5**   **Samples: 32**   **RAM: 2 MB**   **Level 2**

Bowed, variation 1
Single notes
1 velocity layer

---

09 Gongs_Bow-2   **Range: A3–A5**   **Samples: 20**   **RAM: 1 MB**   **Level 2**

Bowed, variation 2
Single notes
1 velocity layer

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16 CHINA GONGS

Level 2: Single hits
Rolls normal and crescendo

01 China-Gongs	**Range: C4–A6**	**Samples: 78**	**RAM: 4 MB**	**Level 2**

Single hits
Rolls normal (AB switch) and crescendo
3 velocity layers
Release samples
AB switch: release duration long/short

Mapping:
C4–A4: single hits, var. 1–6 (p/mf/ff)
C5–A5: tremolo, var. 1–6
C6–A6: tremolo crescendo, var. 1–6

single hits   tremolo   tremolo cresc.
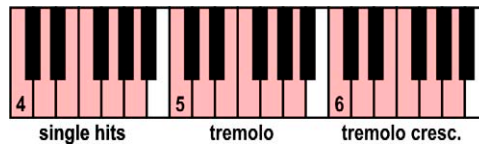
17 PEKING OPERA GONGS

Level 2: Single hits
Rolls crescendo, slow, medium, and fast

01 Peking-Opera-Gongs	**Range: C4–G7**	**Samples: 29**	**RAM: 1 MB**	**Level 2**

Single hits
Rolls crescendo slow, medium, and fast
3 velocity layers

Mapping:
C4–G4: single hits, var. 1–5 (p/mf/ff)
C5–G5: tremolo crescendo slow, var. 1–5
C6–G6: tremolo crescendo medium, var. 1–5
C7–G7: tremolo crescendo fast, var. 1–5

single hits   slow tremolo   medium tremolo   fast tremolo
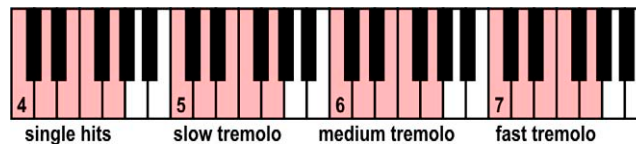
Matrices

Matrix - LEVEL 1

L1 01 Piatti   Samples: 167   RAM: 10 MB   **Level 1**

Piatti A: Single hits
Piatti B: 13, 18, 20, and 22"

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	01 Piatti-A_Single-Hits	02 Piatti-B_13Z-Za	06 Piatti-B_18Z-Is	07 Piatti-B_20Z-Is	09 Piatti-B_22Z-Za

L1 02 Cymbals   Samples: 222   RAM: 13 MB   **Level 1**

Patches:
01 Cym-A_Stick
02 Cym-A_Mallet

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Cym-A_Stick	02 Cym-A_Mallet

L1 03 Finger cymbals   Samples: 10   RAM: 1 MB   **Level 1**

Patch: 01 Finger_cymbals

L1 04 Tamtam-A   Samples: 39   RAM: 2 MB   **Level 1**

Patch: 12 Tam-A

L1 05 Tamtam serie-B   Samples: 35   RAM: 2 MB   **Level 1**

Patches:
02 Tam-B_60
04 Tam-B_100
06 Tam-B_130

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	02 Tam-B_60	04 Tam-B_100	06 Tam-B_130

L1 06 Gongs   Samples: 164   RAM: 10 MB   **Level 1**

Patches:
01 Gongs_SO
04 Gongs_Wood

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Gongs_SO	04 Gongs_Wood

Matrix - LEVEL 2

01 Piatti all   Samples: 256   RAM: 16 MB   **Level 2**

Piatti A: Single hits
Piatti B: 13", 15", 16" K and K2, 18", 20" Istanbul and Avedis, 22"

Matrix switches: Horizontal: Keyswitches, C1–A1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
V1	01 Piatti-A_Single-Hits	01 Piatti-B_11Z-Chi	02 Piatti-B_13Z-Za	03 Piatti-B_15Z-Za	04 Piatti-B_16Z-K	05 Piatti-B_16Z-K2	06 Piatti-B_18Z-Is	07 Piatti-B_20Z-Is	08 Piatti-B_20Z-Za	09 Piatti-B_22Z-Za

02 Cymbal-A all   Samples: 222   RAM: 13 MB   **Level 2**

Patches:
01 Cym-A_Stick
02 Cym-A_Mallet

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Cym-A_Stick	02 Cym-A_Mallet

03 Cymbal-B all   Samples: 122   RAM: 7 MB   **Level 2**

Cymbal B
Drumsticks, mallets, metal mallets, brushes

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	01 Cym-B_Stick	02 Cym-B_Mallet	03 Cym-B_Metal	04 Cym-B_Brush

04 Cymbal-C all   Samples: 108   RAM: 6 MB   **Level 2**

Cymbal C
Drumsticks, mallets, metal mallets

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Cym-C_Stick	02 Cym-C_Mallet	03 Cym-C_Metal

05 Cymbal-D all   Samples: 126   RAM: 7 MB   **Level 2**

Cymbal D
Drumsticks, mallets, metal mallets, brushes

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	01 Cym-D_Stick	02 Cym-D_Mallet	03 Cym-D_Metal	04 Cym-D_Brush

06 Cymbal crash 15Z all   Samples: 334   RAM: 20 MB   **Level 2**

15" crash cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

07 Cymbal crash 16Z all — **Samples: 336 RAM: 21 MB Level 2**

16" crash cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

08 Cymbal china 18Z all — **Samples: 224 RAM: 14 MB Level 2**

18" China cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

09 Cymbal china 22Z all — **Samples: 222 RAM: 13 MB Level 2**

22" China cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

10 Cymbal ride 20Z all — **Samples: 323 RAM: 20 MB Level 2**

20" ride cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

11 Cymbal ride 22Z all — **Samples: 344 RAM: 21 MB Level 2**

22" ride cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

12 Cymbal splash 6Z all — **Samples: 118 RAM: 7 MB Level 2**

6" splash cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

13 Cymbal splash 8Z all — **Samples: 147 RAM: 9 MB Level 2**

8" splash cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

14 Cymbal splash 12Z all

Samples: 220 **RAM: 13 MB** **Level 2**

12" splash cymbal
Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	21 Stick	22 Mallet	23 Timpani m.	24 Brush	25 Rod	26 Bow

15 Finger cymbals all

Samples: 10 **RAM: 1 MB** **Level 2**

Patch: 01 Finger_cymbals

16 Tamtam-A all

Samples: 39 **RAM: 2 MB** **Level 2**

Patch: 12 Tam-A

17 Tamtam serie-B all

Samples: 68 **RAM: 4 MB** **Level 2**

Patches:
01 Tam-B_52, 02 Tam-B_60, 03 Tam-B_85, 04 Tam-B_100, 05 Tam-B_110, 06 Tam-B_130

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Tam-B_52	02 Tam-B_60	03 Tam-B_85	04 Tam-B_100	05 Tam-B_110	06 Tam-B_130

18 Tamtam serie-C all

Samples: 95 **RAM: 5 MB** **Level 2**

Patches:
01 Tam-C_30, 02 Tam-C_40, 03 Tam-C_50, 04 Tam-C_60, 05 Tam-C_70, 06 Tam-C_80, 07 Tam-C_90

Matrix switches: Horizontal: Keyswitches, C1–F#1

	C1	C#1	D1	D#1	E1	F1	F#1
V1	01 Tam-C_30	02 Tam-C_40	03 Tam-C_50	04 Tam-C_60	05 Tam-C_70	06 Tam-C_80	07 Tam-C_90

19 Gongs all

Samples: 468 **RAM: 29 MB** **Level 2**

Soft, wood, and metal mallets, bowed

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
V1	soft mallets	soft mallets, rolls	soft mallets, rolls crescendo	metal mallets	bowed #1	
V2	wood mallets	wood mallets, rolls	wood mallets, rolls crescendo	metal mallets	bowed #2	

20 Exotic gongs all

Samples: 107 **RAM: 6 MB** **Level 2**

China gongs and Peking Opera gongs

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	China gongs	Peking Opera gongs

Presets

Cymbals VSL Preset Level 1   **Samples: 637** **RAM: 39 MB** **Level 1**

Matrices:
L1 01 Piatti
L1 02 Cymbals
L1 03 Finger cymbals
L1 04 Tamtam-A
L1 05 Tamtam serie-B
L1 08 Gongs
Keyswitches: C7–F7

Cymbals VSL Preset Level 2   **Samples: 1850** **RAM: 115 MB** **Level 2**

Matrices:
01 Piatti all
02 Cymbal-A all
03 Cymbal-B all
07 Cymbal crash 16Z all
09 Cymbal china 22Z all
15 Finger cymbals all
16 Tamtam-A all, 17 Tamtam serie-B all
19 Gongs all
20 Exotic Gongs all
Keyswitches: C7–A7

84 Mallets

The mallets are the melody instruments in the percussion group. The tasks performed by the mallet instruments in the orchestra are determined by their sound characteristics and are consequently many and varied.

Patches

01 CELESTA

Level 1: Single notes, sustained, normal and soft sound
Level 2: Single notes, staccato
Glissandos, diatonic and pentatonic, slow and fast, up and down

01 CELESTA_sustain	**Range: C2–F7**	**Samples: 264**	**RAM: 16 MB**	**Level 1**

Single notes, sustained
4 velocity layers

02 CELESTA_sustain-soft	**Range: C2–F7**	**Samples: 264**	**RAM: 16 MB**	**Level 1**

Single notes, sustained
Soft sound
4 velocity layers

03 CELESTA_staccato	**Range: C2–F7**	**Samples: 132**	**RAM: 8 MB**	**Level 2**

Single notes, staccato
2 velocity layers

04 CELESTA_glissandi	Range: C3–A6	Samples: 36	RAM: 2 MB	**Level 2**

Glissandos
Diatonic and pentatonic
Slow and fast
Up and down
1 velocity layer
AB switch: up/down

Mapping:
C3–G3 – slow glissandos
C4–G4 – fast glissandos
C–E: diatonic low range/high range/full
C#–F#: pentatonic low range/high range/full
G: diatonic and pentatonic, full
C5–A5 – slow glissandos
C6–A6 – fast glissandos
C–C#: cross glissando, diatonic/pentatonic
G–A: cross glissandos, diatonic and pentatonic, var. 1/2
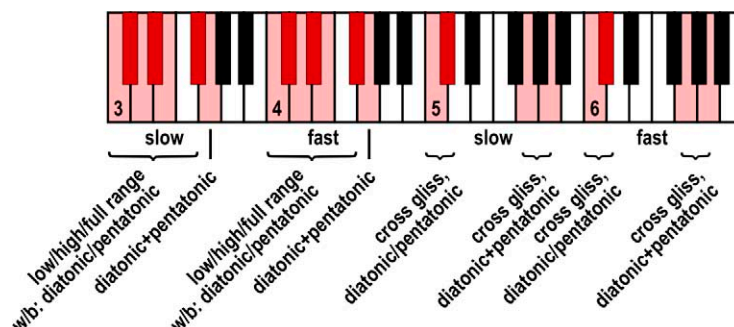
02 GLOCKENSPIEL - A

The Glockenspiel is mapped an octave lower than it sounds.

02 GLOCKENSPIEL - A/01 Metal Mallet

Level 1: Single notes
Rolls
Glissandos fast, chromatic and diatonic, up and down
Level 2: Single notes with vibrato
Rolls crescendo
Chord tremolos

01 Glsp-A_ME_Single-Hits	Range: F4–D7	Samples: 204	RAM: 12 MB	**Level 1**

Metal mallets: Single notes
3 velocity layers
2 Alternations

02 Glsp-A_ME_Single-Hits_Vib	Range: F4–D7	Samples: 68	RAM: 4 MB	**Level 2**

Metal mallets: Single notes, with vibrato
2 velocity layers

03 Glsp-A_ME_Roll	**Range: F4–D7**	**Samples: 136**	**RAM: 8 MB**	**Level 1**

Metal mallets: Rolls
2 velocity layers
Release samples

04 Glsp-A_ME_Roll_cre	**Range: F4–D7**	**Samples: 34**	**RAM: 2 MB**	**Level 2**

Metal mallets: Rolls, crescendo
1 velocity layer

05 Glsp-A_ME_Roll_chords	**Range: F4–D7**	**Samples: 136**	**RAM: 8 MB**	**Level 2**

Metal mallets: Rolls for chord or alternating tremolos
2 velocity layers
Release samples

06 Glsp-A_ME_Glissandi	**Range: C3–D7**	**Samples: 56**	**RAM: 3 MB**	**Level 1**

Metal mallets: Glissandos, fast, up and down
Chromatic and diatonic
Starting notes for chromatic upward glissandos: F#5–G#5, B5, C6, D6, E6, F6, G#6, A6, B6, C7
1 velocity layer
AB switch: up/down

Mapping:
C3–B3: octaves, chromatic, up and down
C4–D4: full range, diatonic/chromatic, up and down
F4–B4: cross glissandos, full range, var. 1–4
F5–D7: octaves, diatonic, up and down (C7 and D7 down only)
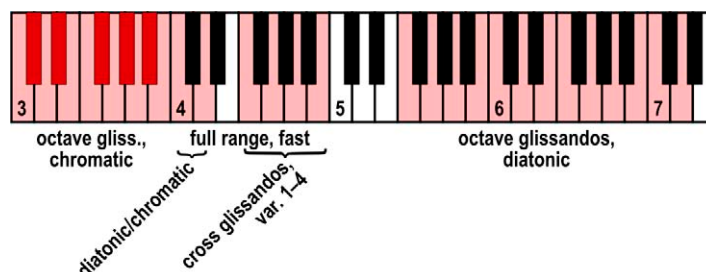
02 GLOCKENSPIEL - A/02 Wood Mallet

Level 1: Single notes
Rolls
Level 2: Single notes with vibrato

01 Glsp-A_WO_Single-Hits	**Range: F4–D7**	**Samples: 204**	**RAM: 12 MB**	**Level 1**

Wood mallets: Single notes
3 velocity layers
2 Alternations

02 Glsp-A_WO_Single-Hits_Vib	**Range: F4–D7**	**Samples: 68**	**RAM: 4 MB**	**Level 2**

Wood mallets: Single notes, with vibrato
2 velocity layers

| **03 Glsp-A_WO_Roll** | **Range: F4–D7** | **Samples: 136** | **RAM: 8 MB** | **Level 1** |

Wood mallets: Rolls
2 velocity layers
Release samples

02 GLOCKENSPIEL - A/03 Plastic Mallet

Level 2: Single notes normal and vibrato
Rolls normal and crescendo
Glissandos fast, diatonic, up and down
Cross glissandos diatonic and chromatic

| **01 Glsp-A_PL_Single-Hits** | **Range: F4–D7** | **Samples: 204** | **RAM: 12 MB** | **Level 2** |

Plastic mallets: Single notes
3 velocity layers
2 Alternations

| **02 Glsp-A_PL_Single-Hits_Vib** | **Range: F4–D7** | **Samples: 67** | **RAM: 4 MB** | **Level 2** |

Plastic mallets: Single notes, with vibrato
2 velocity layers

| **03 Glsp-A_PL_Roll** | **Range: F4–D7** | **Samples: 136** | **RAM: 8 MB** | **Level 2** |

Plastic mallets: Rolls
2 velocity layers
Release samples

| **04 Glsp-A_PL_Roll_cre** | **Range: F4–D7** | **Samples: 34** | **RAM: 2 MB** | **Level 2** |

Plastic mallets: Rolls, crescendo
1 velocity layer

| **05 Glsp-A_PL_Glissandi** | **Range: C4–D7** | **Samples: 35** | **RAM: 2 MB** | **Level 2** |

Plastic mallets: Glissandos, fast, up and down, diatonic
Cross glissandos, diatonic and chromatic
1 velocity layer
AB switch: up/down

Mapping:
C4–D4: full range, diatonic/chromatic, up and down
F4, G4, A4, A#4, B4: cross glissandos, full range, var. 1–5
F5–D7: octaves, diatonic, up and down
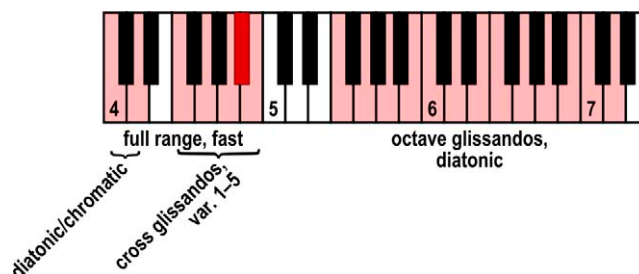
02 GLOCKENSPIEL - A/04 Big Metal Mallet

Level 2: Single notes normal and vibrato
Rolls normal and crescendo
Glissandos fast, diatonic and chromatic, up and down

01 Glsp-A_bME_Single-Hits	**Range: F4–D7**	**Samples: 68**	**RAM: 4 MB**	**Level 2**

Large metal mallets: Single notes
1 velocity layer
2 Alternations

02 Glsp-A_bME_Single-Hits_Vib	**Range: F4–D7**	**Samples: 34**	**RAM: 2 MB**	**Level 2**

Large metal mallets: Single notes, with vibrato
1 velocity layer

03 Glsp-A_bME_Roll	**Range: F4–D7**	**Samples: 68**	**RAM: 4 MB**	**Level 2**

Large metal mallets: Rolls
1 velocity layer
Release samples

04 Glsp-A_bME_Roll_cre	**Range: F4–D7**	**Samples: 34**	**RAM: 2 MB**	**Level 2**

Large metal mallets: Rolls, crescendo
1 velocity layer

05 Glsp-A_bME_Glissandi	**Range: C3–D7**	**Samples: 56**	**RAM: 3 MB**	**Level 2**

Large metal mallets
 Glissandos, fast, up and down
Diatonic and chromatic
1 velocity layer
AB switch: up/down

> **Mapping:**
> C3–B3: octaves, chromatic, up and down
> C4–D4: full range, diatonic/chromatic, up and down
> F4–A4: cross glissandos, full range, var. 1–3
> F5–D7: octaves, diatonic, up and down
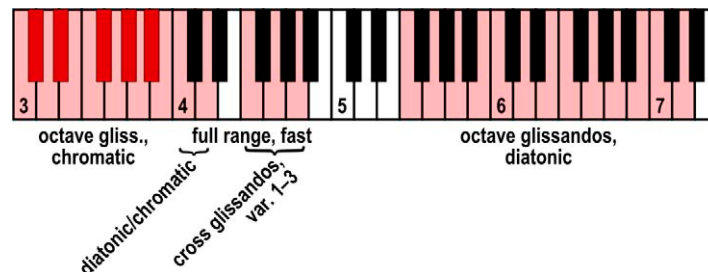
03 GLOCKENSPIEL - B

The Glockenspiel is mapped an octave lower than it sounds.

03 GLOCKENSPIEL - B/01 Metal Mallet

Level 2: Single notes
Rolls
Glissandos fast and slow, diatonic and chromatic, up and down
Cross glissandos, fast

01 Glsp-B_ME_Single-Hits	**Range: F4–C7**	**Samples: 120**	**RAM: 7 MB**	**Level 2**

Metal mallets: Single notes
2 velocity layers
2 Alternations

02 Glsp-B_ME_Roll	**Range: F4–C7**	**Samples: 120**	**RAM: 7 MB**	**Level 2**

Metal mallets: Rolls
2 velocity layers
Release samples

03 Glsp-B_ME_Glissandi_fa	**Range: C4–C7**	**Samples: 32**	**RAM: 2 MB**	**Level 2**

Metal mallets: Glissandos, fast, up and down
Diatonic, chromatic, and pentatonic
Cross glissandos, var. 1–4
1 velocity layer

Mapping:
C4–D4: full range, diatonic/chromatic, up and down
F4–B4: cross glissandos, full range, var. 1–4
C5: full range, pentatonic, up and down
G5–C7: octaves, diatonic, up and down
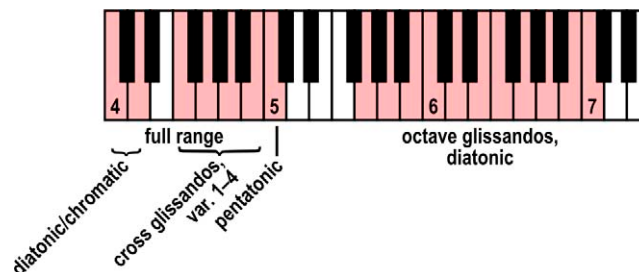
04 Glsp-B_ME_Glissandi_sl   **Range: C4–C7**   **Samples: 26**   **RAM: 1 MB**   **Level 2**

Metal mallets: Glissandos, slow, up and down
Diatonic and chromatic
1 velocity layer

      Mapping:
      C4–D4: full range, diatonic/chromatic, up and down
      G5–C7: octaves, diatonic, up and down

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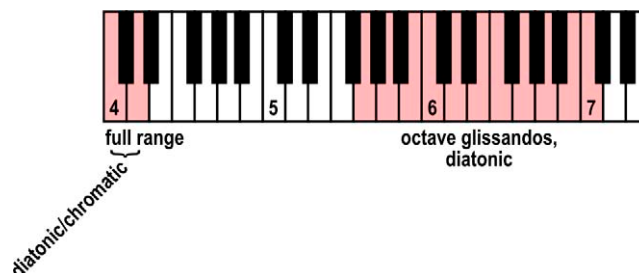
03 GLOCKENSPIEL - B/02 Wood Mallet

Level 2: Single notes
Rolls

01 Glsp-B_WO_Single-Hits   **Range: F4–C7**   **Samples: 120**   **RAM: 7 MB**   **Level 2**

Wood mallets: Single notes
2 velocity layers
2 Alternations

02 Glsp-B_WO_Roll   **Range: F4–C7**   **Samples: 120**   **RAM: 7 MB**   **Level 2**

Wood mallets: Rolls
2 velocity layers
Release samples

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03 GLOCKENSPIEL - B/03 Plastic Mallet

Level 2: Single notes
Rolls

01 Glsp-B_PL_Single-Hits   **Range: F4–C7**   **Samples: 180**   **RAM: 11 MB**   **Level 2**

Plastic mallets: Single notes
3 velocity layers
2 Alternations

02 Glsp-B_PL_Roll   **Range: F4–C7**   **Samples: 149**   **RAM: 9 MB**   **Level 2**

Plastic mallets: Rolls
2 velocity layers
Release samples

04 XYLOPHONE

The Xylophone is mapped an octave lower than it sounds.

04 XYLOPHONE/01 Wood Mallet

Level 1: Single notes
Rolls normal
Level 2: Rolls strong dynamics, 0.5., 1, and 3 sec.
Glissandos fast, medium, and slow, diatonic and chromatic
Cross glissandos fast and medium

01 XYL_WO_Single-Hits	**Range: F3–C7**	**Samples: 262**	**RAM: 16 MB**	**Level 1**
Wood mallets: Single notes 3 velocity layers 2 Alternations				
02 XYL_WO_Roll	**Range: F3–C7**	**Samples: 264**	**RAM: 16 MB**	**Level 1**
Wood mallets: Rolls 3 velocity layers Release samples				
03 XYL_WO_Roll_dyn_0'5s	**Range: F3–C7**	**Samples: 88**	**RAM: 5 MB**	**Level 2**
Wood mallets: Rolls strong dynamics, 0.5 sec. 1 velocity layer AB switch: crescendo/diminuendo				
04 XYL_WO_Roll_dyn_1s	**Range: F3–C7**	**Samples: 88**	**RAM: 5 MB**	**Level 2**
Wood mallets: Rolls strong dynamics, 1 sec. 1 velocity layer AB switch: crescendo/diminuendo				
05 XYL_WO_Roll_dyn_3s	**Range: F3–C7**	**Samples: 88**	**RAM: 5 MB**	**Level 2**
Wood mallets: Rolls strong dynamics, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo				
06 XYL_WO_Roll_chords	**Range: F3–C7**	**Samples: 86**	**RAM: 5 MB**	**Level 2**
Wood mallets: Rolls for chord or alternating tremolos 1 velocity layer Release samples				

07 XYL_WO_Glissandi_fa (me) **Range: C3–C7** **Samples: 82** **RAM: 5 MB** **Level 2**

Wood mallets: Glissandos, fast/medium, up and down
Diatonic and chromatic
Cross glissandos, var. 1–2
2 velocity layers
AB switch: up/down

Mapping:
C3–D3: full range, diatonic/chromatic, up and down
F3–G3: cross glissandos, var. 1–2
F4–C7: octaves, diatonic, up and down
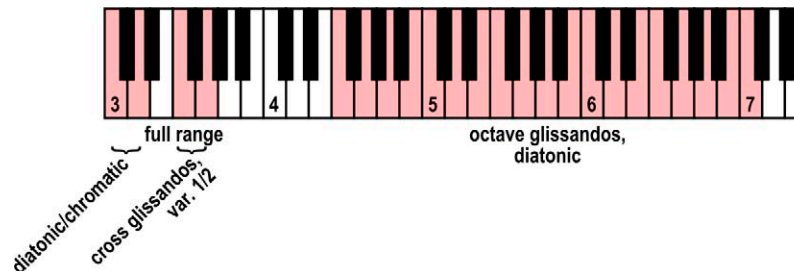
09 XYL_WO_Glissandi_sl **Range: F4–C7** **Samples: 38** **RAM: 2 MB** **Level 2**

Wood mallets: Glissandos, slow, up and down
Diatonic
1 velocity layer
AB switch: up/down

Mapping:
F4–C7: octaves, diatonic, up and down

04 XYLOPHONE/02 Soft Plastic Mallet

Level 1: Single notes
Rolls
Level 2: Glissandos fast, medium, and slow, diatonic and chromatic
Cross glissandos fast and medium

01 XYL_sPL_Single-Hits **Range: F3–C7** **Samples: 264** **RAM: 16 MB** **Level 1**

Soft plastic mallets: Single notes
3 velocity layers
2 Alternations

02 XYL_sPL_Roll **Range: F3–C7** **Samples: 264** **RAM: 16 MB** **Level 1**

Soft plastic mallets: Rolls
3 velocity layers
Release samples

03 XYL_sPL_Glissandi_fa (me)   **Range: C3–C7**   **Samples: 82**   **RAM: 5 MB**   **Level 2**

Soft plastic mallets: Glissandos, fast/medium, up and down
Diatonic and chromatic
Cross glissandos, var. 1–2
2 velocity layers
AB switch: up/down

      Mapping:
      C3–D3: full range, diatonic/chromatic, up and down
      F3–G3: cross glissandos, var. 1–2
      F4–C7: octaves, diatonic, up and down
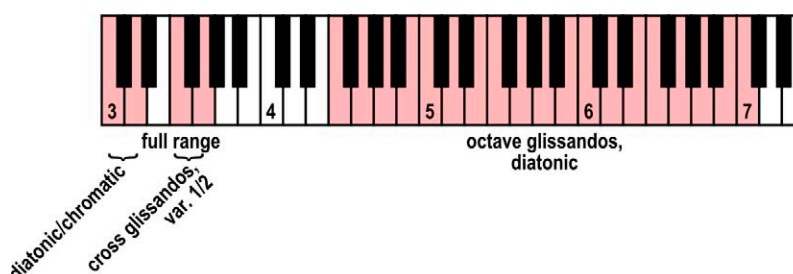
05 XYL_sPL_Glissandi_sl   **Range: F4–C7**   **Samples: 38**   **RAM: 2 MB**   **Level 2**

Soft plastic mallets
Glissandos, slow, up and down
Diatonic
1 velocity layer
AB switch: up/down

      Mapping:
      F4–C7: octaves, diatonic, up and down

04 XYLOPHONE/03 Medium Plastic Mallet

Level 2: Single notes
Rolls
Glissandos fast, medium, and slow, diatonic and chromatic
Cross glissandos fast and medium

01 XYL_mPL_Single-Hits   **Range: F3–C7**   **Samples: 264**   **RAM: 16 MB**   **Level 2**

Medium plastic mallets: Single notes
3 velocity layers
2 Alternations

02 XYL_mPL_Roll   **Range: F3–C7**   **Samples: 262**   **RAM: 16 MB**   **Level 2**

Medium plastic mallets: Rolls
3 velocity layers
Release samples

03 XYL_mPL_Glissandi_fa   Range: C3–C7   Samples: 80   RAM: 5 MB   **Level 2**

Medium plastic mallets: Glissandos, fast, up and down
Diatonic and chromatic
Cross glissandos, var. 1–3
2 velocity layers
AB switch: up/down

Mapping:
C3–D3: full range, diatonic/chromatic, up and down
F3–A3: cross glissandos, var. 1–3
F4–C7: octaves, diatonic, up and down
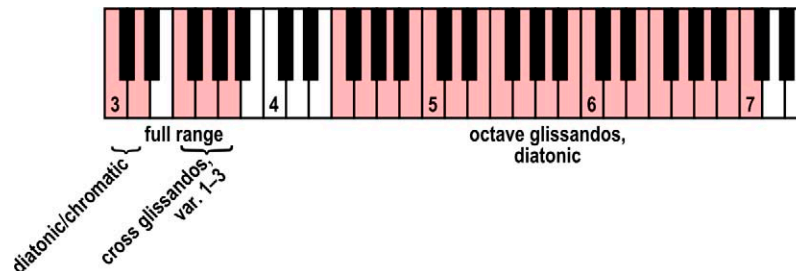
04 XYL_mPL_Glissandi_me   Range: C3–C7   Samples: 82   RAM: 5 MB   **Level 2**

Medium plastic mallets: Glissandos, medium, up and down
Diatonic and chromatic
Cross glissandos, var. 1–2
2 velocity layers
AB switch: up/down

Mapping:
C3–D3: full range, diatonic/chromatic, up and down
F3–G3: cross glissandos, var. 1–2
F4–C7: octaves, diatonic, up and down
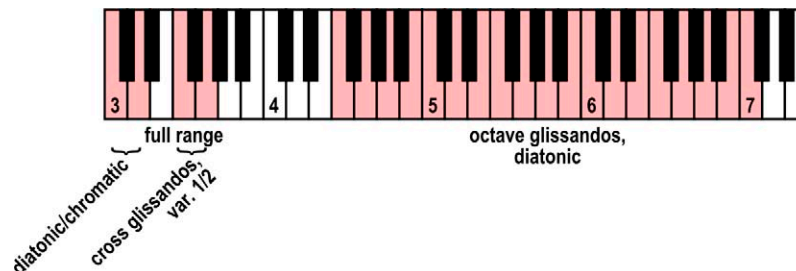
05 XYL_mPL_Glissandi_sl   Range: F4–C7   Samples: 38   RAM: 2 MB   **Level 2**

Medium plastic mallets
Glissandos, slow, up and down
Diatonic
1 velocity layer
AB switch: up/down

Mapping:
F4–C7: octaves, diatonic, up and down

04 XYLOPHONE/04 Hard Plastic Mallet

Level 2: Single notes
Rolls
Glissandos fast, medium, and slow, diatonic and chromatic
Cross glissandos fast and medium

| **01 XYL_hPL_Single-Hits** | **Range: F3–C7** | **Samples: 228** | **RAM: 14 MB** | **Level 2** |

Hard plastic mallets: Single notes
3 velocity layers
2 Alternations

| **02 XYL_hPL_Roll** | **Range: F3–C7** | **Samples: 264** | **RAM: 16 MB** | **Level 2** |

Hard plastic mallets: Rolls
3 velocity layers
Release samples

| **03 XYL_hPL_Glissandi_fa** | **Range: C3–C7** | **Samples: 45** | **RAM: 2 MB** | **Level 2** |

Hard plastic mallets: Glissandos, fast, up and down
Diatonic and chromatic
Cross glissandos, var. 1–3
1 velocity layer
AB switch: up/down

Mapping:
C3–D3: full range, diatonic/chromatic, up and down
F3–A3: cross glissandos, var. 1–3
F4–C7: octaves, diatonic, up and down
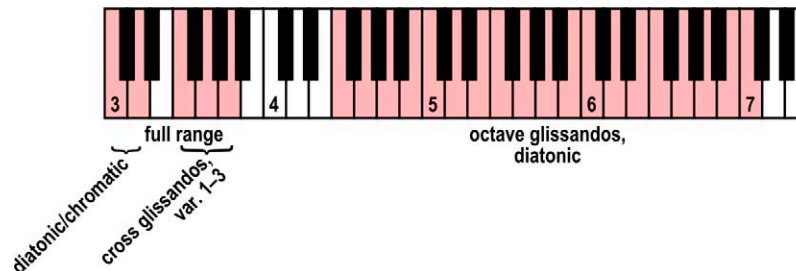
04 XYL_hPL_Glissandi_me **Range: C3–C7** **Samples: 82** **RAM: 5 MB** **Level 2**

Hard plastic mallets: Glissandos, medium, up and down
Diatonic and chromatic
Cross glissandos, var. 1–2
2 velocity layers
AB switch: up/down

Mapping:
C3–D3: full range, diatonic/chromatic, up and down
F3–G3: cross glissandos, var. 1–2
F4–C7: octaves, diatonic, up and down
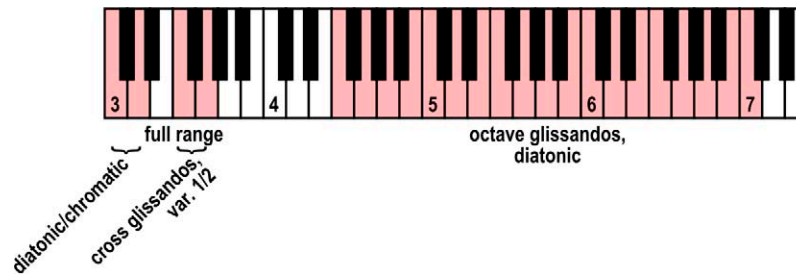
05 XYL_hPL_Glissandi_sl **Range: F4–C7** **Samples: 76** **RAM: 4 MB** **Level 2**

Hard plastic mallets
Glissandos, slow, up and down
Diatonic
2 velocity layers
AB switch: up/down

Mapping:
F4–C7: octaves, diatonic, up and down

04 XYLOPHONE/05 Yarn Mallet

Level 2: Single notes
Rolls

01 XYL_YA_Single-Hits **Range: F4–C7** **Samples: 264** **RAM: 16 MB** **Level 2**

Yarn-wound mallets: Single notes
3 velocity layers
2 Alternations

02 XYL_YA_Roll **Range: F4–C7** **Samples: 240** **RAM: 15 MB** **Level 2**

Yarn-wound mallets: Rolls
3 velocity layers
Release samples

04 XYLOPHONE/06 Cluster Mallet

Level 2: Cluster mallets
Single hits and tremolo
Diatonic, chromatic, and pentatonic

01 XYL_CLU_Single-Hits	**Range: C2–A6**	**Samples: 32**	**RAM: 2 MB**	**Level 2**

Cluster mallets
Clusters, diatonic, chromatic, and pentatonic
1 velocity layer

Mapping:
C2–B2: diatonic, var. 1
C3–A3: diatonic, var. 2
C4–B4: chromatic
C5–A5: pentatonic, var. 1
C6–A6: pentatonic, var. 2
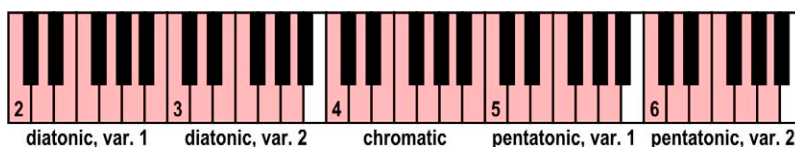
02 XYL_CLU_Roll	**Range: C2–G6**	**Samples: 54**	**RAM: 3 MB**	**Level 2**

Cluster mallets
Cluster tremolo
Diatonic, chromatic, and pentatonic
1 velocity layer
Release samples

Mapping:
C2–G2: diatonic, var. 1
C3–A3: diatonic, var. 2
C4–A4: chromatic
C5–G5: pentatonic, var. 1
C6–G6: pentatonic, var. 2
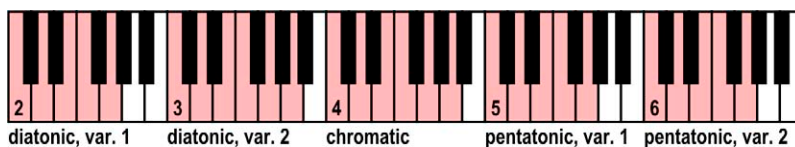
05 VIBRAPHONE

05 VIBRAPHONE/01 Medium Mallet

Level 1: Single hits without, with slow and fast vibrato
Glissandos fast and slow, diatonic and chromatic, up and down
Level 2: Single notes, secco
Rolls normal; rolls dynamics, 2 and 4 sec.
Chord tremolos

---

01 VIB_MD_Single-Hits_speed-0   **Range: D#3–G6**   **Samples: 222**   **RAM: 13 MB**   **Level 1**

Medium mallets
Single hits, without vibrato
3 velocity layers
2 Alternations

---

02 VIB_MD_Single-Hits_speed-sl   **Range: D#3–G6**   **Samples: 148**   **RAM: 9 MB**   **Level 1**

Medium mallets
Single hits, slow vibrato
2 velocity layers
2 Alternations

---

03 VIB_MD_Single-Hits_speed-fa   **Range: D#3–G6**   **Samples: 148**   **RAM: 9 MB**   **Level 1**

Medium mallets
Single hits, fast vibrato
2 velocity layers
2 Alternations

---

04 VIB_MD_Single-Hits_secco   **Range: D#3–G6**   **Samples: 148**   **RAM: 9 MB**   **Level 2**

Medium mallets
Single hits, secco
2 velocity layers
2 Alternations

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05 VIB_MD_Rolls   **Range: D#3–G6**   **Samples: 221**   **RAM: 13 MB**   **Level 2**

Medium mallets
Rolls
3 velocity layers
Release samples

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06 VIB_MD_Rolls_dyn_2s   **Range: D#3–G6**   **Samples: 74**   **RAM: 4 MB**   **Level 2**

Medium mallets
Rolls, dynamics, 2 sec., without vibrato
1 velocity layer
AB switch: crescendo/diminuendo

---

07 VIB_MD_Rolls_dyn_4s   **Range: D#3–G6**   **Samples: 74**   **RAM: 4 MB**   **Level 2**

Medium mallets
Rolls, dynamics, 4 sec., without vibrato
1 velocity layer
AB switch: crescendo/diminuendo

---

08 VIB_MD_Roll_chords	Range: D#3–G6	Samples: 148	RAM: 9 MB	**Level 2**

Medium mallets
Rolls for chord or alternating tremolos
2 velocity layers
Release samples

09 VIB_MD_Glissandi_fast (slow)	Range: C2–F7	Samples: 48	RAM: 3 MB	**Level 1**

Medium mallets
Glissandos, fast/slow, up and down
Diatonic and chromatic
Cross glissandos
1 velocity layer
AB switch: up/down

Mapping:
C, D – full range, diatonic/chromatic, up and down
F, G – cross glissandos, full range, diatonic/chromatic
C2–G2: fast vibrato, var. 1
C3–G3: fast vibrato, var. 2
C4–G4: no vibrato
F5–F7: octaves, diatonic, up and down, no vibrato
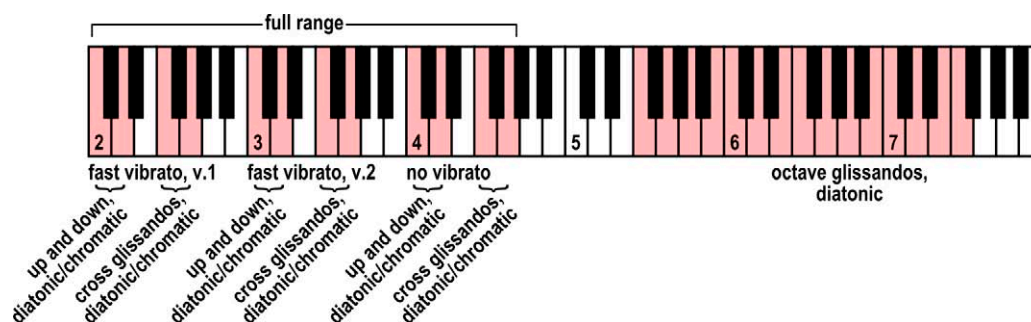
05 VIBRAPHONE/02 Soft Mallet

Level 1: Single hits without, with slow and fast vibrato
Rolls
Level 2: Rolls dynamics, 2 and 4 sec.
Chord tremolos

01 VIB_SO_Single-Hits_speed-0	Range: D#3–G6	Samples: 147	RAM: 9 MB	**Level 1**

Soft mallets
Single hits, without vibrato
3 velocity layers
2 Alternations

02 VIB_SO_Single-Hits_speed-sl	Range: D#3–G6	Samples: 148	RAM: 9 MB	**Level 1**

Soft mallets
Single hits, slow vibrato
3 velocity layers
2 Alternations

03 VIB_SO_Single-Hits_speed-fa	**Range: D#3–G6**	**Samples: 148**	**RAM: 9 MB**	**Level 1**

Soft mallets
Single hits, fast vibrato
3 velocity layers
2 Alternations

04 VIB_SO_Rolls	**Range: D#3–G6**	**Samples: 148**	**RAM: 9 MB**	**Level 2**

Soft mallets
Rolls
3 velocity layers
Release samples

05 VIB_SO_Rolls_dyn_2s	**Range: D#3–G6**	**Samples: 74**	**RAM: 4 MB**	**Level 2**

Soft mallets
Rolls, dynamics, 2 sec., without vibrato
1 velocity layer
AB switch: crescendo/diminuendo

06 VIB_SO_Rolls_dyn_4s	**Range: D#3–G6**	**Samples: 74**	**RAM: 4 MB**	**Level 2**

Soft mallets
Rolls, dynamics, 4 sec., without vibrato
1 velocity layer
AB switch: crescendo/diminuendo

07 VIB_SO_Roll_chords	**Range: D#3–G6**	**Samples: 148**	**RAM: 9 MB**	**Level 2**

Soft mallets
Rolls for chord or alternating tremolos
2 velocity layers
Release samples

05 VIBRAPHONE/03 Hard Mallet

Level 2: Single hits without, with slow and fast vibrato

01 VIB_HA_Single-Hits_speed-0	**Range: D#3–G6**	**Samples: 148**	**RAM: 9 MB**	**Level 2**

Hard mallets
Single hits, without vibrato
3 velocity layers
2 Alternations

02 VIB_HA_Single-Hits_speed-sl	**Range: D#3–G6**	**Samples: 148**	**RAM: 9 MB**	**Level 2**

Hard mallets
Single hits, slow vibrato
3 velocity layers
2 Alternations

03 VIB_HA_Single-Hits_speed-fa	**Range: D#3–G6**	**Samples: 148**	**RAM: 9 MB**	**Level 2**

Hard mallets
Single hits, fast vibrato
3 velocity layers
2 Alternations

05 VIBRAPHONE/04 Bowed

Level 2: Short and long notes without and with fast vibrato

01 VIB_Bow-short_speed-0	Range: D#3–G6	Samples: 37	RAM: 2 MB	Level 2

Bowed
Short notes, without vibrato
1 velocity layer
2 Alternations

02 VIB_Bow-short_speed-fa	Range: D#3–G6	Samples: 37	RAM: 2 MB	Level 2

Bowed
Short notes, fast vibrato
1 velocity layer
2 Alternations

03 VIB_Bow-long_speed-0	Range: D#3–G6	Samples: 37	RAM: 2 MB	Level 2

Bowed
Long notes, without vibrato
1 velocity layer

04 VIB_Bow-long_speed-fa	Range: D#3–G6	Samples: 37	RAM: 2 MB	Level 2

Bowed
Long notes, fast vibrato
1 velocity layer

06 MARIMBA

06 MARIMBA/01 Hard Mallet

Level 1: Single hits, normal
Rolls
Glissandos, fast and slow, diatonic and pentatonic
Cross glissandos
Level 2: Single hits, secco
Rolls dynamics, 1, 2, and 4 sec.
Chord tremolos

01 MAR_HA_Single-Hits	Range: C2–C7	Samples: 366	RAM: 22 MB	Level 1

Hard mallets
Single hits
3 velocity layers
2 Alternations

02 MAR_HA_Single-Hits_secco	Range: C2–C7	Samples: 122	RAM: 7 MB	Level 2

Hard mallets
Single hits, secco
2 velocity layers

03 MAR_HA_Roll	**Range: C2–C7**	**Samples: 244**	**RAM: 15 MB**	**Level 1**

Hard mallets
Rolls
2 velocity layers
Release samples

04 MAR_HA_Roll_dyn_1s	**Range: C2–C7**	**Samples: 122**	**RAM: 7 MB**	**Level 2**

Hard mallets
Rolls, dynamics, 1 sec.
1 velocity layer
AB switch: crescendo/diminuendo

05 MAR_HA_Roll_dyn_2s	**Range: C2–C7**	**Samples: 122**	**RAM: 7 MB**	**Level 2**

Hard mallets
Rolls, dynamics, 2 sec.
1 velocity layer
AB switch: crescendo/diminuendo

06 MAR_HA_Roll_dyn_4s	**Range: C2–C7**	**Samples: 122**	**RAM: 7 MB**	**Level 2**

Hard mallets
Rolls, dynamics, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

07 MAR_HA_Roll_chords	**Range: C2–C7**	**Samples: 244**	**RAM: 15 MB**	**Level 2**

Hard mallets
Rolls for chord or alternating tremolos
2 velocity layers
Release samples

08 MAR_HA_Glissandi_fast (slow)	**Range: C4–B6**	**Samples: 21**	**RAM: 1 MB**	**Level 1**

Hard mallets
Glissandos fast/slow, up and down
Diatonic and pentatonic
Cross glissandos
1 velocity layer
AB switch: up/down

Mapping:
C4–E4: diatonic, up and down, low/middle/high range
G5: diatonic, up and down, full range
C5–E5: cross glissandos, diatonic, low/middle/high range
G5: cross glissandos, diatonic, full range
C5–E5: pentatonic, up and down, low/middle/high range
G6–A6: cross glissandos, pentatonic, low/middle/high range

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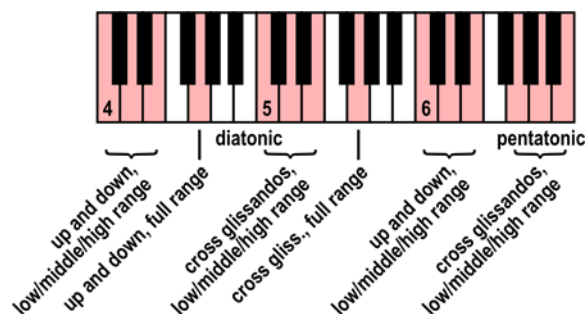
06 MARIMBA/02 Soft Mallet

Level 1: Single hits, normal
Rolls
Glissandos, fast and slow, diatonic and pentatonic
Cross glissandos
Level 2: Single hits, secco
Rolls dynamics, 1, 2, and 4 sec.
Chord tremolos

---

01 MAR_SO_Single-Hits	**Range: C2–C7**	**Samples: 366**	**RAM: 22 MB**	**Level 1**

Soft mallets
Single hits
3 velocity layers
2 Alternations

---

02 MAR_SO_Single-Hits_secco	**Range: C2–C7**	**Samples: 183**	**RAM: 11 MB**	**Level 1**

Soft mallets
Single hits, secco
3 velocity layers

---

03 MAR_SO_Roll	**Range: C2–C7**	**Samples: 244**	**RAM: 15 MB**	**Level 2**

Soft mallets
Rolls
2 velocity layers
Release samples

| **04 MAR_SO_Roll_dyn_1s** | **Range: C2–C7** | **Samples: 122** | **RAM: 7 MB** | **Level 2** |

Soft mallets
Rolls, dynamics, 1 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **05 MAR_SO_Roll_dyn_2s** | **Range: C2–C7** | **Samples: 122** | **RAM: 7 MB** | **Level 2** |

Soft mallets
Rolls, dynamics, 2 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **06 MAR_SO_Roll_dyn_4s** | **Range: C2–C7** | **Samples: 122** | **RAM: 7 MB** | **Level 2** |

Soft mallets
Rolls, dynamics, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **07 MAR_SO_Roll_chords** | **Range: C2–C7** | **Samples: 244** | **RAM: 15 MB** | **Level 2** |

Soft mallets
Rolls for chord or alternating tremolos
2 velocity layers
Release samples

| **08 MAR_SO_Glissandi_fast (slow)** | **Range: C4–B6** | **Samples: 21** | **RAM: 1 MB** | **Level 1** |

Soft mallets
Glissandos fast/slow, up and down
Diatonic and pentatonic
Cross glissandos
1 velocity layer
AB switch: up/down

Mapping:
C4–E4: diatonic, up and down, low/middle/high range
G5: diatonic, up and down, full range
C5–E5: cross glissandos, diatonic, low/middle/high range
G5: cross glissandos, diatonic, full range
C5–E5: pentatonic, up and down, low/middle/high range
G6–A6: cross glissandos, pentatonic, low/middle/high range
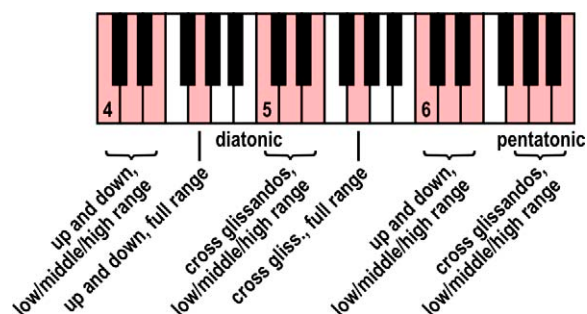
06 MARIMBA/03 Additional Mallets

Level 2: Very soft, medium soft, and extra hard mallets
Single hits
Rolls

01 MAR_SO+_low_Single-Hits

Range: C2–A4   **Samples: 128**   **RAM: 8 MB**   **Level 2**

Very soft mallets
Lower range: Single hits
2 velocity layers
2 Alternations

02 MAR_SO+_low_Single-Hits_secco

Range: C2–A4   **Samples: 68**   **RAM: 4 MB**   **Level 2**

Very soft mallets
Lower range: Single hits, secco
2 velocity layers

03 MAR_SO+_low_Roll

Range: C2–E4   **Samples: 100**   **RAM: 6 MB**   **Level 2**

Very soft mallets
Lower range: Rolls
2 velocity layers
Release samples

04 MAR_SO-med_low_Single-Hits

Range: C2–C6   **Samples: 182**   **RAM: 11 MB**   **Level 2**

Medium soft mallets
Lower range: Single hits
2 velocity layers
2 Alternations

05 MAR_SO-med_low_Roll

Range: C2–D4   **Samples: 100**   **RAM: 6 MB**   **Level 2**

Medium soft mallets
Lower range: Rolls
2 velocity layers
Release samples

06 MAR_SO-med_low_Roll_chords

Range: C2–D5   **Samples: 148**   **RAM: 9 MB**   **Level 2**

Medium soft mallets
Rolls for chord or alternating tremolos
2 velocity layers
Release samples

07 MAR_HA-super_high_Single-Hits

Range: A#2–C7   **Samples: 196**   **RAM: 12 MB**   **Level 2**

Extra hard mallets
Higher range: Single hits
2 velocity layers
2 Alternations

08 MAR_HA-super_high_Roll

Range: A#2–C7   **Samples: 196**   **RAM: 12 MB**   **Level 2**

Extra hard mallets
Higher range: Rolls
2 velocity layers
Release samples

06 MARIMBA/04 Specials

Level 2: Rubber mallets, superball, handle, fingers, fingernails, and bowed
Single notes

01 MAR_Rubber	**Range: C2–C7**	**Samples: 183**	**RAM: 11 MB**	**Level 2**

Rubber mallets
Single notes
3 velocity layers

02 MAR_Superball	**Range: C2–D6**	**Samples: 98**	**RAM: 6 MB**	**Level 2**

Superball
Lower range: Single notes
2 velocity layers

03 MAR_Handle	**Range: C2–C7**	**Samples: 61**	**RAM: 3 MB**	**Level 2**

Handle
Single notes
1 velocity layer

04 MAR_Finger	**Range: C2–C7**	**Samples: 61**	**RAM: 3 MB**	**Level 2**

Fingers
Single notes
1 velocity layer

05 MAR_Finger-nail	**Range: C2–C7**	**Samples: 61**	**RAM: 3 MB**	**Level 2**

Fingernails
Single notes
1 velocity layer

06 MAR_Bow	**Range: C2–C7**	**Samples: 61**	**RAM: 3 MB**	**Level 2**

Bowed
Single notes
1 velocity layer

07 WOODBLOCKS

Level 1: Wood mallets
Single hits, tremolo normal and dynamics
1–4 upbeats
Level 2: Rubber, normal and soft yarn-wound mallets
Single hits, tremolo normal and dynamics
1–4 upbeats

01 WBL_Wood (Rubber/Yarn/Yarn-soft)	**Range: C2–A#6** **Samples: 160** **RAM: 10 MB**		**Level 1**

01 Wood/02 Rubber/03 Yarn/04 Soft yarn mallets
Single notes
Tremolo normal and dynamics
1–4 upbeats
3 velocity layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
C2–A#2 – Block 1
C3–A#3 – Block 2
C4–A#4 – Block 3
C5–A#5 – Block 4
C6–A#6 – Block 5
C, D: single notes
C#: tremolo, normal
D#–F: dynamics, 1, 2, and 4 sec.
F#: crescendo-accelerando and diminuendo-ritardando
G–A#: 1–4 upbeats

08 TEMPLEBLOCKS

08 TEMPLEBLOCKS/01 Wood Mallet

Level 1: Single hits
Rolls
Level 2: 1–3 upbeats
Rolls dynamics, 1, 2 and 4 sec., accelerando and ritardando
Glissandos, slow and fast, up and down

| **01 TBL_Wood_Single-Hits** | **Range: A#2–G6** | **Samples: 108** | **RAM: 6 MB** | **Level 1** |

Wood mallets
Single notes
3 velocity layers
2 Alternations
AB switch: alternation left/right

       Mapping:
       A#2–G4: left hand/(right hand)
       A#4–G6: right hand

A: left/right hand
B: left hand   B: right hand

| **02 TBL_Wood_UB_a1** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
1 upbeat
2 velocity layers

| **03 TBL_Wood_UB_a2** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
2 upbeats
2 velocity layers

| **04 TBL_Wood_UB_a3** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
3 upbeats
2 velocity layers

| **05 TBL_Wood_Roll** | **Range: A#2–G4** | **Samples: 72** | **RAM: 4 MB** | **Level 1** |

Wood mallets
Rolls
2 velocity layers
Release samples

| **06 TBL_Wood_Roll_dyn-1s** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
Rolls, dynamics, 1 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **07 TBL_Wood_Roll_dyn-2s** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
Rolls, dynamics, 2 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **08 TBL_Wood_Roll_dyn-4s** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
Rolls, dynamics, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **09 TBL_Wood_Roll_acc-rit** | **Range: A#2–G4** | **Samples: 36** | **RAM: 2 MB** | **Level 2** |

Wood mallets
Rolls, accelerando and ritardando
1 velocity layer
AB switch: accelerando/ritardando

| **10 TBL_Wood_gliss** | **Range: C4–D4** | **Samples: 4** | **RAM: 1 MB** | **Level 2** |

Wood mallets
Glissandos, slow and fast, up and down
1 velocity layer
AB switch: up/down

> **Mapping:**
> C4: slow, up and down
> D4: fast, up and down

08 TEMPLEBLOCKS/02 Yarn Mallet

Level 2: Single hits
1–3 upbeats
Rolls normal and dynamics, 1, 2 and 4 sec., accelerando and ritardando
Glissandos, slow and fast, up and down

---

01 TBL_Yarn_Single-Hits   **Range: A#2–G6**   **Samples: 105**   **RAM: 6 MB**   **Level 2**

Hard yarn-wound mallets
Single notes
3 velocity layers
2 Alternations
AB switch: alternation left/right

> **Mapping:**
> A#2–G4: left hand/(right hand)
> A#4–G6: right hand

A: left/right hand
B: left hand
B: right hand

---

02 TBL_Yarn_UB_a1   **Range: A#2–G4**   **Samples: 36**   **RAM: 2 MB**   **Level 2**

Yarn mallets
1 upbeat
2 velocity layers

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03 TBL_Yarn_UB_a2   **Range: A#2–G4**   **Samples: 36**   **RAM: 2 MB**   **Level 2**

Yarn mallets
2 upbeats
2 velocity layers

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04 TBL_Yarn_UB_a3   **Range: A#2–G4**   **Samples: 36**   **RAM: 2 MB**   **Level 2**

Yarn mallets
3 upbeats
2 velocity layers

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05 TBL_Yarn_Roll   **Range: A#2–G4**   **Samples: 72**   **RAM: 4 MB**   **Level 2**

Yarn mallets
Rolls
2 velocity layers
Release samples

---

06 TBL_Yarn_Roll_dyn-1s   **Range: A#2–G4**   **Samples: 36**   **RAM: 2 MB**   **Level 2**

Yarn mallets
Rolls, dynamics, 1 sec.
1 velocity layer
AB switch: crescendo/diminuendo

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07 TBL_Yarn_Roll_dyn-2s   **Range: A#2–G4**   **Samples: 36**   **RAM: 2 MB**   **Level 2**

Yarn mallets
Rolls, dynamics, 2 sec.

---

1 velocity layer
AB switch: crescendo/diminuendo

08 TBL_Yarn_Roll_dyn-4s	**Range: A#2–G4**	**Samples: 36**	**RAM: 2 MB**	**Level 2**

Yarn mallets
Rolls, dynamics, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

09 TBL_Yarn_Roll_acc-rit	**Range: A#2–G4**	**Samples: 36**	**RAM: 2 MB**	**Level 2**

Yarn mallets
Rolls, accelerando and ritardando
1 velocity layer
AB switch: accelerando/ritardando

10 TBL_Yarn_gliss	**Range: C4–D4**	**Samples: 4**	**RAM: 1 MB**	**Level 2**

Yarn mallets
Glissandos, slow and fast, up and down
1 velocity layer
AB switch: up/down

> **Mapping:**
> C4: slow, up and down
> D4: fast, up and down

08 TEMPLEBLOCKS/03 Additional Mallets

Level 2: Soft yarn and rubber mallets
Single hits

01 TBL_Yarn-soft_Single-Hits	**Range: A#2–G6**	**Samples: 108**	**RAM: 6 MB**	**Level 2**

Soft yarn mallets
Single notes
3 velocity layers
2 Alternations
AB switch: alternation left/right

> **Mapping:**
> A#2–G4: left hand/(right hand)
> A#4–G6: right hand

02 TBL_Rubber_Single-Hits **Range: A#2–G6** **Samples: 107** **RAM: 6 MB** **Level 2**

Rubber mallets
Single notes
3 velocity layers
2 Alternations
AB switch: alternation left/right

> **Mapping:**
> A#2–G4: left hand/(right hand)
> A#4–G6: right hand

A: left/right hand
B: left hand   B: right hand

09 LITHOPHONE small

Level 1: Single hits
Level 2: 1–4 upbeats
Rolls
Rubbed

01 LI-s_Single-Hits **Range: G3–D7** **Samples: 96** **RAM: 6 MB** **Level 1**

Single notes
3 velocity layers
2 Alternations
AB switch: alternation left/right

> **Mapping:**
> G5–D7: left hand/(right hand)
> G3–D5: right hand

B: right hand   A: left/right hand
                         B: left hand

02 LI-s_UB-a1 **Range: G5–D7** **Samples: 32** **RAM: 2 MB** **Level 2**

1 upbeat
2 velocity layers

03 LI-s_UB-a2 **Range: G5–D7** **Samples: 32** **RAM: 2 MB** **Level 2**

2 upbeats
2 velocity layers

04 LI-s_UB-a3 **Range: G5–D7** **Samples: 32** **RAM: 2 MB** **Level 2**

3 upbeats
2 velocity layers

05 LI-s_UB-a4 **Range: G5–D7** **Samples: 32** **RAM: 2 MB** **Level 2**

4 upbeats
2 velocity layers

06 LI-s_Roll	**Range: G5–D7**	**Samples: 64**	**RAM: 4 MB**	**Level 2**

Rolls
2 velocity layers
Release samples

07 LI-s_rubbed	**Range: G5–D7**	**Samples: 16**	**RAM: 1 MB**	**Level 2**

Single notes: Rubbed, sustained
1 velocity layer

10 STIR XYLOPOHONE

Level 2: Small, medium, and large stir xylophone
Glissandos, up and down, various speeds
Single notes

01 ST-XY_small (medium)	**Range: C4–C7**	**Samples: 26**	**RAM: 1 MB**	**Level 2**

01 Small/02 Medium Stir Xylophone
Glissandos, up and down, various speeds
Single notes (2 alternations)
Single notes tone range: C6–C7
1 velocity layer
2 Alternations
AB switch: up/down

Mapping:
C4–E4: glissandos, up and down, slow/medium/fast
G4–A4: glissandos, accelerando, up and down, slow/fast
C6–C7: single notes
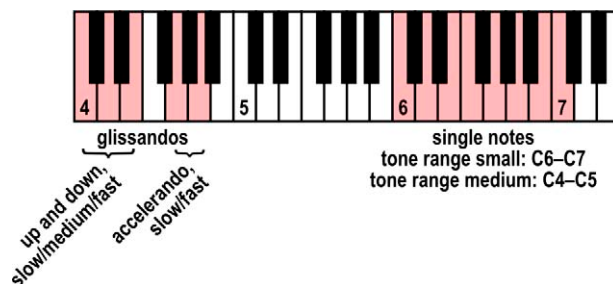
03 ST-XY_large   **Range: C4–C7   Samples: 40   RAM: 2 MB   Level 2**

Large stir xylophone
Glissandos, up and down, various speeds
Single notes (2 alternations)
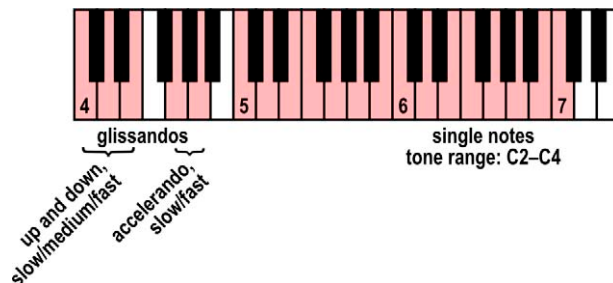Single notes tone range: C2–C4
1 velocity layer
2 Alternations
AB switch: up/down

Mapping:

C4–E4: glissandos, up and down, slow/medium/fast
G4–A4: glissandos, accelerando, up and down, slow/fast
C5–C7: single notes

Matrices

Matrix - LEVEL 1

L1 01 Celesta   **Samples: 264   RAM: 16 MB   Level 1**

Single notes
Sustained, normal and soft

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	sustained normal
V2	sustained soft

L1 02 Glockenspiel-A   **Samples: 668   RAM: 41 MB   Level 1**

Metal and wood mallets
Single notes and rolls
Glissandos

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 2 zones

	C1	C#1	D1
metal mallets	single notes	rolls	glissandos
wood mallets	%	%	%

L1 03 Xylophone   **Samples: 1458   RAM: 91 MB   Level 1**

Wood/soft plastic mallets
Single notes and rolls
Glissandos fast, medium, and slow

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
wood mallets	single notes	rolls	glissandos fast	glissandos medium	glissandos slow
soft plastic mallets	%	%	%	%	%

L1 04 Vibraphone   **Samples: 961   RAM: 60 MB   Level 1**

Medium and soft mallets
Single notes
Without, with slow and with fast vibrato

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 2 zones

	C1	C#1	D1
medium mallets	no vibrato	slow vibrato	fast vibrato
soft mallets	%	%	%

L1 05 Marimbaphone   **Samples: 1303 RAM: 81 MB**   **Level 1**

Hard and soft mallets
Single notes and rolls
Glissandos fast and slow

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
hard mallets	single notes	rolls	glissandos fast	glissandos slow
soft mallets	%	%	%	%

L1 06 Wood+Templeblocks   **Samples: 268   RAM: 16 MB**   **Level 1**

Patches:
01 WBL_Wood
01 TBL_Wood_Single-hits

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 WBL_Wood	01 TBL_Wood_Single-hits

L1 07 Lithophone small   **Samples: 96   RAM: 6 MB**   **Level 1**

Patch: 01 Ll-s_Single-Hits

Matrix - LEVEL 2

01 Celesta all   **Samples: 432   RAM: 27 MB**   **Level 2**

Sustained normal and soft
Staccato
Glissando

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	sustained normal	sustained soft	staccato	glissando

02 Glockenspiel-A metal all   **Samples: 498   RAM: 31 MB**   **Level 2**

Metal mallet
Single notes normal and with vibrato
Rolls normal and crescendo
Chord tremolo
Glissando

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single notes normal	rolls normal	chord tremolo	glissando
V2	single notes vibrato	rolls crescendo	chord tremolo	glissando

03 Glockenspiel-A wood all   Samples: 408   RAM: 25 MB   **Level 2**

Wood mallet
Single notes normal and with vibrato
Rolls

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
V1	single notes normal	rolls
V2	single notes vibrato	rolls

04 Glockenspiel-A plastic all   Samples: 476   RAM: 29 MB   **Level 2**

Plastic mallet
Single notes normal and with vibrato
Rolls normal and crescendo
Glissando

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 2 zones

	C1	C#1	D1
V1	single notes normal	rolls normal	glissando
V2	single notes vibrato	rolls crescendo	glissando

05 Glockenspiel-A big.metal all   Samples: 260   RAM: 16 MB   **Level 2**

Big metal mallet
Single notes normal and with vibrato
Rolls normal and crescendo
Glissando

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 2 zones

	C1	C#1	D1
V1	single notes normal	rolls normal	glissando
V2	single notes vibrato	rolls crescendo	glissando

06 Glockenspiel-B all   Samples: 657   RAM: 41 MB   **Level 2**

Metal, wood, and plastic mallets
Single notes
Rolls
Glissandos, fast and slow

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1
metal mallets	single notes	rolls	glissandos fast	glissandos slow
wood mallets	%	%	% (metal)	% (metal)
plastic mallets	%	%	% (metal)	% (metal)

07 Xylophone wood all   Samples: 1078 RAM: 67 MB   Level 2

Single notes
Rolls, chord tremolo, rolls dynamics 0.5, 1, and 3 sec.
Glissando fast, medium, and slow

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1
V1	single notes	rolls	rolls dyn. 0.5 sec.	glissandos fast
V2	single notes	chord tremolo	rolls dyn. 1 sec.	glissandos medium
V3	single notes	chord tremolo	rolls dyn. 3 sec.	glissandos slow

08 Xylophone addition mallets 1   Samples: 2151 RAM: 134 MB   Level 2

Soft, medium, and hard plastic mallets
Single notes
Rolls
Glissando fast, medium, and slow

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1
soft mallets	single notes	rolls	glissandos fast	glissandos medium	glissandos slow
medium mallets	%	%	%	%	%
hard mallets	%	%	%	%	%

09 Xylophone addition mallets 2   Samples: 590   RAM: 36 MB   Level 2

Yarn and cluster mallets
Single hits and rolls

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
yarn mallets	single notes	rolls
cluster mallets	single clusters	cluster rolls

10 Vibraphone medium all   Samples: 1279 RAM: 79 MB   Level 2

Medium mallets
Single notes, without, with slow and with fast vibrato
Single notes, secco
Rolls normal and dynamics
Chord tremolo
Glissando, fast and slow

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1
V1	single notes no vib.	single notes secco	rolls	chord tremolo	glissandos fast
V2	single notes slow vib.	single notes secco	rolls dyn. 2 sec.	chord tremolo	glissandos medium
V3	single notes fast vib.	single notes secco	rolls dyn. 4 sec.	chord tremolo	glissandos slow

11 Vibraphone soft all   **Samples: 813**   **RAM: 50 MB**   **Level 2**

Soft mallets
Single notes, without, with slow and with fast vibrato
Rolls normal and dynamics
Chord tremolo

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 3 zones

	C1	C#1	D1
V1	single notes no vib.	rolls	chord tremolo
V2	single notes slow vib.	rolls dyn. 2 sec.	chord tremolo
V3	single notes fast vib.	rolls dyn. 4 sec.	chord tremolo

12 Vibraphone hard all   **Samples: 444**   **RAM: 27 MB**   **Level 2**

Hard mallets
Single notes, without, with slow and with fast vibrato

Matrix switches: Vertical: Modwheel, 3 zones

	H1
V1	single notes no vib.
V2	single notes slow vib.
V3	single notes fast vib.

13 Vibraphone bow all   **Samples: 148**   **RAM: 9 MB**   **Level 2**

Bowed
Short and long notes
Without and with fast vibrato

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 2 zones

	C1	C#1
no vibrato	short notes	long notes
fast vibrato	%	%

14 Marimba hard all   **Samples: 1262**   **RAM: 78 MB**   **Level 2**

Hard mallets
Single notes normal and secco
Rolls normal and dynamics
Chord tremolo
Glissando fast and slow

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single notes	rolls	rolls dyn. 1 sec.	glissandos fast
V2	single notes secco	chord tremolo	rolls dyn. 2 sec.	glissandos slow

15 Marimba soft all **Samples: 1322 RAM: 82 MB** **Level 2**

Soft mallets
Single notes normal and secco
Rolls normal and dynamics
Chord tremolo
Glissando fast and slow

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single notes	rolls	rolls dyn. 1 sec.	glissandos fast
V2	single notes secco	chord tremolo	rolls dyn. 2 sec.	glissandos slow

16 Marimba additional **Samples: 1118 RAM: 69 MB** **Level 2**

Very soft, medium soft, and extra hard mallets
Single notes
Rolls
Chord tremolo

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 3 zones

	C1	C#1	D1
very soft mallets	single notes	single notes, secco	rolls
medium soft mallets	single notes	rolls	chord tremolo
extra hard mallets	single notes	single notes	rolls

17 Marimba special **Samples: 525   RAM: 32 MB** **Level 2**

Played with rubber mallets, superball, handle, fingers, fingernails, and bowed
Various articulations

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	rubber mallet	superball	handle	fingers	fingernails	bowed

18 Woodblocks all **Samples: 636   RAM: 39 MB** **Level 2**

Wood, rubber, yarn, and soft yarn mallets
Various articulations

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	01 WBL_Wood	02 WBL_Rubber	03 WBL_Yarn	04 WBL_Yarn-soft

19 Templeblocks wood **Samples: 292   RAM: 18 MB** **Level 2**

Wood mallets
Single hits
Rolls normal, accelerando/ritardando, and dynamics
Glissando

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single hits	rolls	rolls dyn. 1 sec.	glissando
V2	single hits	rolls acc./rit.	rolls dyn. 2 sec.	glissando

20 Templeblocks yarn   Samples: 289   RAM: 18 MB   Level 2

Yarn mallets
Single hits
Rolls normal, accelerando/ritardando, and dynamics
Glissando

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single hits	rolls	rolls dyn. 1 sec.	glissando
V2	single hits	rolls acc./rit.	rolls dyn. 2 sec.	glissando

21 Templeblocks additional   Samples: 215   RAM: 13 MB   Level 2

Soft yarn and rubber mallets
Single hits

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
single hits	soft yarn mallets	rubber mallets

22 Lithophone small all   Samples: 272   RAM: 17 MB   Level 2

Single notes
Rolls
Rubbed
1–3 upbeats

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 3 zones

	C1	C#1
V1	single notes	1 upbeat
V2	rolls	2 upbeats
V3	rubbed	3 upbeats

23 Stir Xylophone all   Samples: 92   RAM: 5 MB   Level 2

Small, medium, and large stir xylophone
Various articulations

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 ST-XY_small	02 ST-XY_medium	03 ST-XY_large

Presets

Mallets VSL Preset Level 1 **Samples: 5018 RAM: 313 MB** **Level 1**

Matrices:
L1 01 Celesta
L1 02 Glockenspiel-A,
L1 03 Xylophone
L1 04 Vibraphone
L1 05 Marimbaphone
L1 06 Wood+Templeblocks
L1 07 Lithophone small
Keyswitches: F1–B1

Mallets VSL Preset Level 2 **Samples: 8452 RAM: 528 MB** **Level 2**

Matrices:
01 Celesta all
02 Glockenspiel-A metal all
04 Glockenspiel-A plastic all
07 Xylophone wood all
10 Vibraphone medium all
11 Vibraphone soft all
14 Marimba hard all
15 Marimba soft all
18 Woodblocks all
19 Templeblocks wood,
22 Lithophone small all
23 Stir xylophone all
Keyswitches: F1–E2

85 Bells

Various types of bell and bell substitutes that have been used in the orchestra over the centuries.

Today mainly two instruments have become part of standard instrumentation in the modern opera and symphony orchestra: **tubular bells** and **plate bells**.

Their main role was to act as a substitute for church bells in the orchestra. Tubular bells were developed as an easily portable instrument for everyday use in the orchestra. Their sound was intended to be as close as possible to church bells, a target that they never reached, however. Nowadays their timbre is valued in its own right. They are used in the higher register, while the lower register is covered by the bell plates.

For special effects cow bells, altar-boy bells, sleigh bells and other bells are occasionally called for.

Patches

01 TUBULAR BELLS - A

Tubular Bells A: Philharmonic; Tubular Bells B: Deagen
Level 1: Medium, hard and soft mallets
Single notes
Level 2: Hard and soft mallets
Rolls normal and crescendo

01 Tubular-A_MD_Single-Hit	Range: C3–G#5	Samples: 87	RAM: 5 MB	Level 1

Medium mallets
Single notes
3 velocity layers

02 Tubular-A_HA_Single-Hit	Range: C3–G#5	Samples: 87	RAM: 5 MB	Level 1

Hard mallets
Single notes
3 velocity layers

03 Tubular-A_HA_Roll	Range: C#3–A5	Samples: 87	RAM: 5 MB	Level 2

Hard mallets
Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

04 Tubular-A_HA_Roll_cre	Range: C#3–A5	Samples: 29	RAM: 1 MB	Level 2

Hard mallets
Rolls, crescendo
1 velocity layer

05 Tubular-A_SO_Single-Hit	Range: C3–G#5	Samples: 29	RAM: 1 MB	Level 1

Soft mallets
Single notes
1 velocity layer

06 Tubular-A_SO_Roll	**Range: C#3–A5**	**Samples: 87**	**RAM: 5 MB**	**Level 2**

Soft mallets
Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

07 Tubular-A_SO_Roll_cre	**Range: C#3–A5**	**Samples: 29**	**RAM: 1 MB**	**Level 2**

Soft mallets
Rolls, crescendo
1 velocity layer

02 TUBULAR BELLS - B

Level 1: Medium, hard and soft mallets
Single notes
Level 2: Rolls, medium, hard and soft mallets, brushes
Glissandos, slow and fast
Clusters

01 Tubular-B_MD_Single-Hit	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 1**

Medium mallets
Single notes
3 velocity layers

02 Tubular-B_MD_Roll	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 2**

Medium mallets
Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

03 Tubular-B_HA_Single-Hit	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 1**

Hard mallets
Single notes
3 velocity layers

04 Tubular-B_HA_Roll	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 2**

Hard mallets
Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

05 Tubular-B_SO_Single-Hit	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 1**

Soft mallets
Single notes
3 velocity layers

06 Tubular-B_SO_Roll	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 2**

Soft mallets
Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

07 Tubular-B_Brush_Roll	**Range: E3–G5**	**Samples: 75**	**RAM: 4 MB**	**Level 2**

Brushes
Rolls
1 velocity layer
Release samples
AB switch: release duration long/short

08 Tubular-B_FX	**Range: C4–F4**	**Samples: 6**	**RAM: 1 MB**	**Level 2**

Effects
Glissandos, slow and fast
Clusters
2 velocity layers
AB switch: up/down

> **Mapping:**
> C4–D4: glissandos, slow and fast, up and down
> F4: clusters

03 PLATE BELLS

Level 1: Single notes

01 Plate Bells	**Range: A#2–D5**	**Samples: 75**	**RAM: 4 MB**	**Level 1**

Single notes
3 velocity layers

04 HAND BELLS

Level 2: Metal mallet, triangle beater, bowed
Single notes

01 Hand-Bells_Metal	**Range: D4–F6**	**Samples: 74**	**RAM: 4 MB**	**Level 2**

Metal mallet
Single notes
3 velocity layers

02 Hand-Bells_Triangle	**Range: D4–F6**	**Samples: 74**	**RAM: 4 MB**	**Level 2**

Triangle beater
Single notes
3 velocity layers

03 Hand-Bells_Bow	**Range: D4–F6**	**Samples: 25**	**RAM: 1 MB**	**Level 2**

Bowed
Single notes
1 velocity layer

05 CENCERROS

Level 1: Soft felt, soft and medium yarn mallet, wood mallet
Single notes
Level 2: Hard felt mallet, metal mallet; single notes
Rubbing stick, slow and fast rubs

01 Cencerros_Felt-soft	**Range: D3–D5**	**Samples: 60**	**RAM: 3 MB**	**Level 1**

Soft felt mallet
Single notes
3 velocity layers

02 Cencerros_Felt-hard	**Range: D3–D5**	**Samples: 57**	**RAM: 3 MB**	**Level 2**

Hard felt mallet
Single notes
3 velocity layers

03 Cencerros_Yarn-soft	**Range: D3–D5**	**Samples: 62**	**RAM: 3 MB**	**Level 1**

Soft yarn mallet
Single notes
3 velocity layers

04 Cencerros_Yarn-medium	**Range: D3–D6**	**Samples: 96**	**RAM: 6 MB**	**Level 1**

Medium yarn mallet
Single notes
3 velocity layers

05 Cencerros_Yarn-hard	**Range: D3–D7**	**Samples: 137**	**RAM: 8 MB**	**Level 2**

Hard yarn mallet
Single notes
3 velocity layers

06 Cencerros_Wood	**Range: D3–D7**	**Samples: 138**	**RAM: 8 MB**	**Level 1**

Wood mallet
Single notes
3 velocity layers

07 Cencerros_Metal	**Range: D3–D7**	**Samples: 138**	**RAM: 8 MB**	**Level 2**

Metal mallet
Single notes
3 velocity layers

08 Cencerros_Bow	**Range: D3–D7**	**Samples: 46**	**RAM: 2 MB**	**Level 2**

Bowed
Single notes
1 velocity layer

09 Cencerros_Rub-stick_sl	**Range: D3–D7**	**Samples: 46**	**RAM: 2 MB**	**Level 2**

Rubbing stick
Single notes, slow rub
1 velocity layer

10 Cencerros_Rub-stick_fa	**Range: D3–D7**	**Samples: 46**	**RAM: 2 MB**	**Level 2**

Rubbing stick
Single notes, fast rub
1 velocity layer

06 COWBELLS

Level 2: Cowbells 1 and 2
Wool and wood mallets, triangle beater, bowed, rubbing stick
Single notes, variations, rubs

01 Cowbells-1_Wool (Wood/Triangle)	**Range: C4–G5**	**Samples: 10**	**RAM: 1 MB**	**Level 2**

01 Wool mallet/02 Wood mallet/03 Triangle beater
Single notes, bright and dark
1 velocity layer

> **Mapping:**
> C4–G4: bright, pitch 1–5
> C5–G5: dark, pitch 1–5

bright,
pitch 1–5   dark,
pitch 1–5
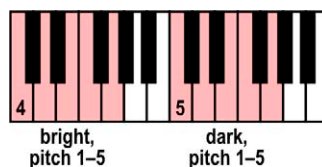
04 Cowbells-1_Bow	**Range: C4–G5**	**Samples: 10**	**RAM: 1 MB**	**Level 2**

Bowed
Single notes, normal and overtones
1 velocity layer

> **Mapping:**
> C4–G4: normal, pitch 1–5
> C5–G5: overtones, pitch 1–5

normal,
pitch 1–5   overtones,
pitch 1–5
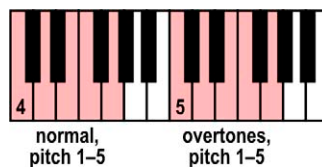
05 Cowbells-1_Rub-stick　　　　**Range: C4–G5**　　**Samples: 10**　　**RAM: 1 MB**　　**Level 2**

Rubbing stick
Single notes, slow and fast rubs
1 velocity layer

> **Mapping:**
> C4–G4: slow, pitch 1–5
> C5–G5: fast, pitch 1–5
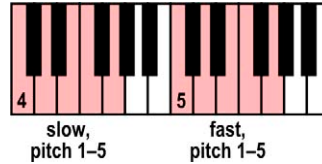
06 Cowbells-2_Wool (Wood/Triangle)　　**Range: C4–G5**　　**Samples: 20**　　**RAM: 1 MB**　　**Level 2**

06 Wool mallet/07 Wood mallet/08 Triangle beater
Single notes, variation A and B
1 velocity layer
2 Alternations

> **Mapping:**
> C4–G4: var. A, pitch 1–5
> C5–G5: var. B, pitch 1–5
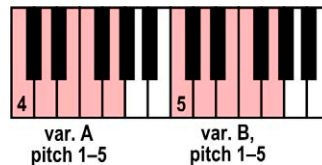
09 Cowbells-2_Rub-stick　　　　**Range: C4–G5**　　**Samples: 20**　　**RAM: 1 MB**　　**Level 2**

Rubbing stick
Single notes, slow and fast rubs
1 velocity layer
2 Alternations

> **Mapping:**
> C4–G4: slow rubs, pitch 1–5
> C5–G5: fast rubs, pitch 1–5
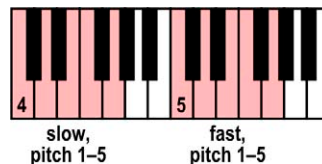
07 CHURCH BELLS

Level 2: Wood and metal mallets
Single notes

01 Church-Bell_Wood	Range: E4–E5	Samples: 2	RAM: 1 MB	Level 2

Wood mallet
Single notes
1 velocity layer

02 Church-Bell_Metal	Range: E4–E5	Samples: 2	RAM: 1 MB	Level 2

Metal mallet
Single notes
1 velocity layer

08 BURMA BELLS

Level 2: Yarn, wood, metal mallets
Single notes

01 Burma.Bell	Range: C3–D6	Samples: 12	RAM: 1 MB	Level 2

2 Burma Bells
Yarn, wood, metal mallets
Single notes
1 velocity layer

Mapping:
C3–D4 – Burma Bell 1
C5–D6 – Burma Bell 2
C–D: yarn-wound mallet
F–G: wood mallet
C'–D': metal mallet
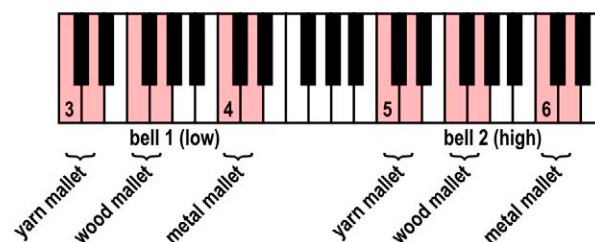
09 JINGLE BELLS

Level 2: Single notes
Tremolo 1 and 4 sec.
Performance repetitions, slow and medium

01 Jingle-Bell	Range: C3–B5	Samples: 63	RAM: 3 MB	Level 2

3 Jingle Bells
Single notes
Tremolo, 1 and 4 sec. (with release samples)
Performance repetitions slow and medium
1 velocity layer
Release samples

Mapping:
C3–B3 – Jingle Bell 1
C4–B4 – Jingle Bell 2
C5–B5 – Jingle Bell 3
C, D: single notes; C#, D#: tremolo, 1 and 4 sec.
F–G: performance repetitions, 60 BPM
A–B: performance repetitions, 90 BPM
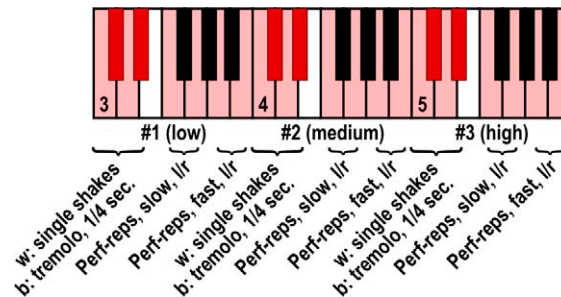
10 BELL TREE

Level 2: Metal mallets and triangle beaters
Strokes and glissandos, up and down

01 Belltree-Metall	Range: C4–A5	Samples: 11	RAM: 1 MB	Level 2

Metal mallets
Single strokes and glissandos, up and down
1 velocity layer

Mapping:
C4–D4: up, slow, mallet 1/2
E4: up, fast, mallet 1
G4–A4: glissando, up, mallet 1/2
C5–D5: down, slow, mallet 1/2
E5–F5: down, fast, mallet 1/2
G5–A5: glissando, down, mallet 1/2

02 Belltree-Tri   Range: C4–A5   Samples: 12   RAM: 1 MB   **Level 2**

Triangle beaters
Single strokes and glissandos, up and down
1 velocity layer

Mapping:
C4–D4: up, slow, beater 1/2
E4–F4: up, fast, beater 1/2
G4–A4: glissando, up, beater 1/2
C5–D5: down, slow, beater 1/2
E5–F5: down, fast, beater 1/2
G5–A5: glissando, down, beater 1/2
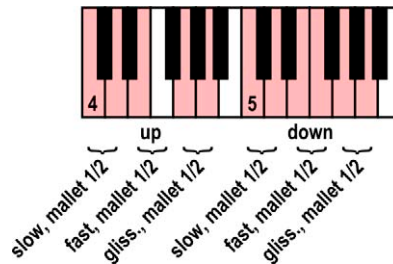
11 BELLS misc

Level 2: Ship's bell, altar-boy bells, finger bells
Single notes

01 Bells-Misc   Samples: 14   RAM: 1 MB   **Level 2**

Ship's bell, altar-boy bells, finger bells
Single notes
1 velocity layer

Mapping:
C2–F2: ship's bell, var. 1–4
C3–D3: low altar-boy bell
F3–G3: high altar-boy bell
C4–E4: low and high altar-boy bell, var. 1–3
C5: finger bells, piano
D5–E5: finger bells, forte, var. 1–2
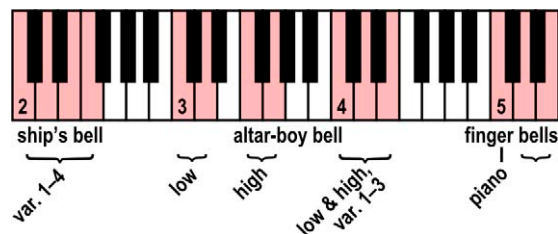
Matrices

Matrix - LEVEL 1

L1 01 Tubular bells-A   **Samples: 203**   **RAM: 12 MB**   **Level 1**

Soft, medium, and hard mallets
Single notes

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	soft mallets	medium mallets	hard mallets

L1 02 Tubular bells-B   **Samples: 225**   **RAM: 14 MB**   **Level 1**

Soft, medium, and hard mallets
Single notes

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	soft mallets	medium mallets	hard mallets

L1 03 Plate bells   **Samples: 75**   **RAM: 4 MB**   **Level 1**

Patch: 01 Plate Bells

L1 04 Cow bells   **Samples: 397**   **RAM: 24 MB**   **Level 1**

Soft felt, soft and hard yarn, and wood mallets
Single notes

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	soft felt mallets	soft yarn mallets	hard yarn mallets	wood mallets

Matrix - LEVEL 2

01 Tubular bells-A   **Samples: 435**   **RAM: 27 MB**   **Level 2**

Soft, hard, and medium mallets
Single notes
Rolls normal and crescendo

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 3 zones

	C1 – soft mallets	C#1 – hard mallets	D1 – medium mallets
V1	single notes	single notes	single notes
V2	rolls	rolls	%
V3	rolls crescendo	rolls crescendo	%

02 Tubular bells-B

Samples: 531 **RAM: 33 MB** **Level 2**

Soft, medium, and hard mallets, brushes
Single notes
Rolls
Effects

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1 – soft mallets	C#1 – medium mallets	D1 – hard mallets	D#1
V1	single notes	single notes	single notes	08 Tubular-B_FX
V2	rolls	rolls	rolls	brush rolls

03 Plate bells

Samples: 75 **RAM: 4 MB** **Level 2**

Patch: 01 Plate Bells

04 Hand bells

Samples: 173 **RAM: 10 MB** **Level 2**

Metal mallets, triangle beater, and bowed
Single notes

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	metal mallets	triangle beater	bowed

05 Cow bells

Samples: 730 **RAM: 45 MB** **Level 2**

Soft and hard felt and yarn mallets, wood and metal mallets, bowed, and rubbing stick
Single notes

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
V1	soft felt mallets	soft yarn mallets	wood mallets	bowed	rubbing stick slow
V2	hard felt mallets	hard yarn mallets	metal mallets	bowed	rubbing stick fast

06 Cencerros

Samples: 130 **RAM: 8 MB** **Level 2**

Cencerros 1 and 2
Wool and wood mallets, triangle beater, bowed, and rubbing stick
Single notes

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
Cencerro 1	wool mallets	wood mallets	triangle beater	bowed	rubbing stick
Cencerro 2	wool mallets	wood mallets	triangle beater	bowed (Cencerro 1)	rubbing stick

07 Church bell

Samples: 4 **RAM: 1 MB** **Level 2**

Wood and metal mallets
Single notes

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	wood mallets	metal mallets

08 Additional bells   Samples: 112   RAM: 7 MB   **Level 2**

Burma bell, jingle bell, bell tree, miscellaneous bells
Various articulations

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	Burma bell	jingle bell	bell tree, metal mallet	bell tree, triangle beater	01 Bells-Misc

Presets

Bells VSL Preset Level 1   Samples: 900   RAM: 56 MB   **Level 1**

Matrices:
L1 01 Tubular bells-A
L1 02 Tubular bells-B
L1 03 Plate bells
L1 04 Cow bells
Keyswitches: F1–G#1

Bells VSL Preset Level 2   Samples: 2190   RAM: 136 MB   **Level 2**

Matrices:
01 Tubular bells-A
02 Tubular bells-B,
03 Plate bells
04 Hand bells
05 Cow bells
06 Cencerros
07 Church bell
08 Additional bells
Keyswitches: F1–C2

86 Percussion

Patches

01 TRIANGLE

Level 1: Triangle A
Single notes, performance repetitions, 1–3 upbeats, tremolo normal and dynamics
Level 2: Triangle B, C, D
Single notes, performance repetitions, 1–4 upbeats, tremolo normal and dynamics
Triangle A and B, performance repetitions dynamics

---

01 Tri-A   **Range: C4–A7**   **Samples: 128**   **RAM: 8 MB**   **Level 1**

Single notes, open and damped (4 alternations)
Performance repetitions
1–3 upbeats
Tremolo normal (with release samples) and dynamics
Velocity mapping: Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, upbeats, and normal tremolo, 4 layers
Release samples
AB switch: crescendo/diminuendo

> **Mapping:**
> C4–D#4: hit from the side, open/damped (damped on black keys)
> F4–G#4: hit from above, open/damped
> C5, D5: performance repetitions (strokes alternating on lower and higher key)
> F6–A6: 1–3 upbeats
> C7: tremolo, normal
> E7–A7: tremolo, strong crescendo and diminuendo, 1/2/4/8 sec.
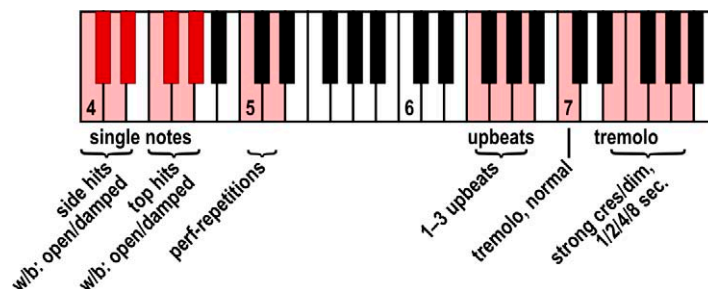
02 Tri-A_perf-rep_dyn9   **Range: C4–D4**   **Samples: 18**   **RAM: 1 MB**   **Level 2**

Performance repetitions
Dynamics, 9 repetitions
1 velocity layer

> **Mapping:**
> C4: crescendo; D4: diminuendo
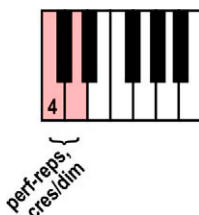
03 Tri-B   **Range: C4–A7**   **Samples: 128**   **RAM: 8 MB**   **Level 2**

Single notes, open and damped (4 alternations)
Performance repetitions
1–3 upbeats
Tremolo normal and dynamics
Velocity mapping: Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Repetitions, upbeats, and normal tremolo, 4 layers
Release samples
AB switch: crescendo/diminuendo

> **Mapping:**
> C4–D#4: hit from the side, open/damped (damped on black keys)
> F4–G#4: hit from above, open/damped
> C5, D5: performance repetitions (strokes alternating on lower and higher key)
> F6–A6: 1–3 upbeats
> C7: tremolo, normal
> E7–A7: tremolo, strong crescendo and diminuendo, 1/2/4/8 sec.
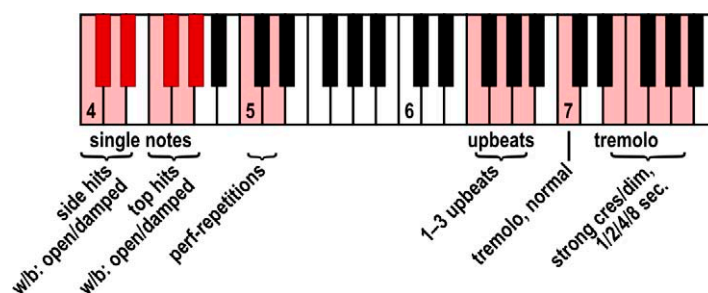
04 Tri-B_perf-rep_dyn9   **Range: C4–D4**   **Samples: 18**   **RAM: 1 MB**   **Level 2**

Performance repetitions
Dynamics, 9 repetitions
1 velocity layer

> **Mapping:**
> C4: crescendo; D4: diminuendo
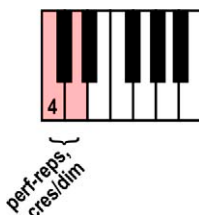
O5 Tri-C   Range: C2–A#7   Samples: 157   RAM: 9 MB   **Level 2**

Various beaters
Single notes, open and damped
Performance repetitions
1–4 upbeats
Tremolo normal and dynamics
Velocity mapping: Single hits and repetitions, 4 layers
Upbeats, 2 layers
Normal tremolo, 3 layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
Wood beater:
C2–D#2: hit from the side, open/damped (damped on black keys)
F2–G2: with vibrato, var. 1/2
Plastic beater:
C3–D#3: hit from the side, open/damped (damped on black keys)
F3–G3: with vibrato, var. 1/2
Thin metal beater:
C4–D#4: hit from the side, open/damped (damped on black keys)
E4: muted fast
F4–G4: with vibrato, var. 1/2
A4–B4: hit from above, var. 1/2
Thick metal beater:
C5–D#5: hit from the side, open/damped (damped on black keys)
F5–G5: with vibrato, var. 1/2
A5–B5: hit from above, var. 1/2
Phrases:
D#6–B6: 1–4 upbeats, slow and fast (slow upbeats on black keys)
C7: tremolo, normal
F7–A#7: tremolo, medium and strong crescendo and diminuendo, 1/2/4 sec. (strong dynamics on black keys)
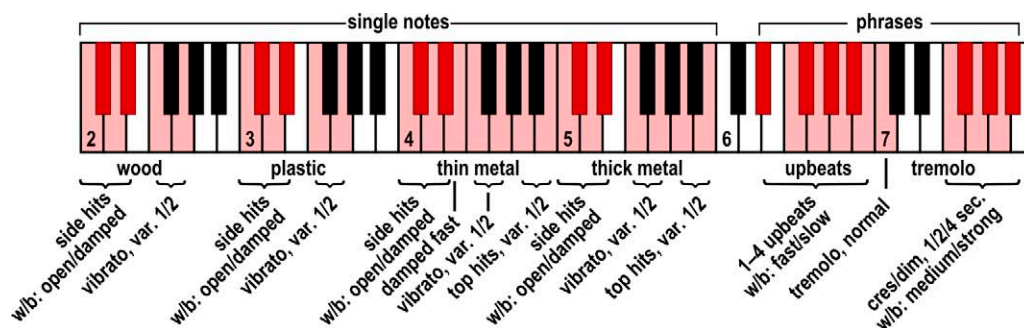
06 Tri-D	**Range: C2–A#7**	**Samples: 139**	**RAM: 8 MB**	**Level 2**

Various beaters
Single notes, open and damped
Performance repetitions
1–3 upbeats
Tremolo normal and dynamics
Velocity mapping: Single hits, repetitions, and normal tremolo, 3 layers
Upbeats, 2 layers
Release samples
AB switch: crescendo/diminuendo

> **Mapping:**
> C2–B2 – wood beater
> C3–B3 – plastic beater
> C4–B4 – thin metal beater
> C5–B5 – thick metal beater
>
> C–D#: hit from the side, open/damped (damped on black keys)
> F–G: with vibrato, var. 1/2
> A–B: hit from above, var. 1/2
> D#6–B6: 1–4 upbeats, slow and fast (slow upbeats on black keys)
> C7: tremolo, normal
> F7–A#7: tremolo, medium and strong crescendo and diminuendo, 1/2/4 sec. (strong dynamics on black keys)
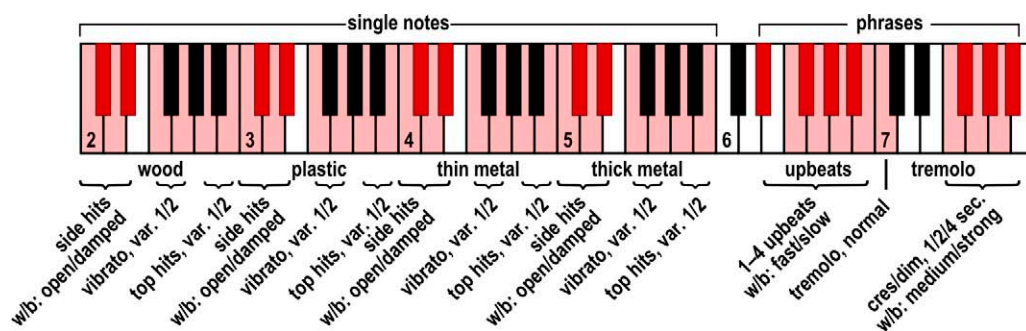
02 CROTALES

Level 1: Metal mallet
Single notes
Level 2: Triangle beater, bowed
Single notes
The crotales are mapped an octave lower than they sound

01 Crotales_Metal	**Range: A#4–F#7**	**Samples: 60**	**RAM: 3 MB**	**Level 1**

Metal mallet
Single notes
2 velocity layers

02 Crotales_Tri	**Range: A#4–F#7**	**Samples: 60**	**RAM: 3 MB**	**Level 2**

Triangle beater
Single notes
2 velocity layers

03 Crotales_Bow	**Range: A#4–F#7**	**Samples: 30**	**RAM: 1 MB**	**Level 2**

Bowed
Single notes
1 velocity layer

03 JAP SINGING BOWLS

Level 2: Wood and rubber mallets, single notes
Single notes, secco (damped)

01 J-Bowls_Wood	**Range: B4–D6**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Wood mallet
Single notes
1 velocity layer

02 J-Bowls_Rubber	**Range: B4–D6**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Rubber mallet
Single notes
1 velocity layer

02 J-Bowls_secco	**Range: B4–D6**	**Samples: 13**	**RAM: 1 MB**	**Level 2**

Single notes, secco (damped)
1 velocity layer

04 THUNDERSHEET

Level 1: Thundersheet A
Various techniques
Level 2: Thundersheets B, C, D, E
Various techniques

01 Thunder-Sheet_A	**Range: C2–E5**	**Samples: 21**	**RAM: 1 MB**	**Level 1**

Various techniques
Single hits, tremolo, rubs, bowed, and shaken
1 velocity layer
Release samples

Mapping:
C2: tremolo
E2–A2: rubbed with the hand, var. 1–4
C3–E3: bowed, var. 1–3
C4–F4: single hits, var. 1–4
G4–B4: metal chain, var. 1–3
C5–D5: shaken, forte
E5: shaken, piano
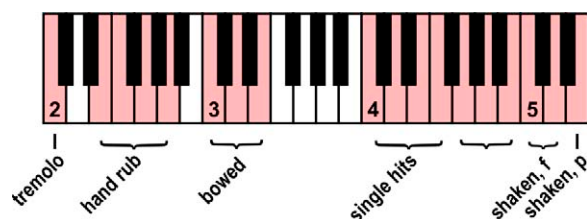
02 Thunder-Sheet_B   Range: C2–E5   Samples: 21   RAM: 1 MB   **Level 2**

Various techniques
Single hits, tremolo, rubs, bowed, and shaken
1 velocity layer
Release samples

Mapping:
C2–D2: tremolo, var. 1–2
E2–G2: rubbed with the hand, var. 1–3
C3–E3: bowed, var. 1–3
C4–F4: single hits, var. 1–4
G4–B4: metal chain, var. 1–3
C5: shaken, forte
E5: shaken, piano
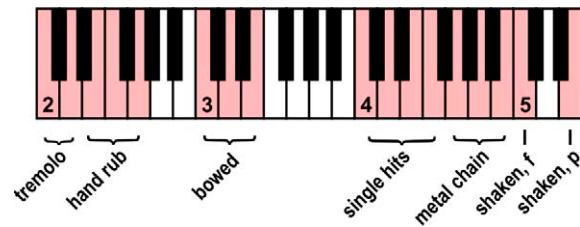
03 Thunder-Sheet_C   Range: C2–E5   Samples: 20   RAM: 1 MB   **Level 2**

Various techniques
Single hits, tremolo, rubs, bowed, and shaken
1 velocity layer
Release samples

Mapping:
C2: tremolo
E2–G2: rubbed with the hand, var. 1–3
C3–D3: bowed, var. 1–2
C4–F4: single hits, var. 1–4
G4–B4: metal chain, var. 1–3
C5–D5: shaken, forte
E5: shaken, piano
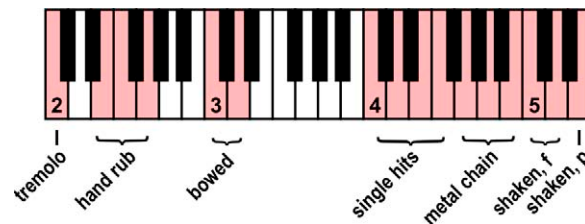
04 Thunder-Sheet_D **Range: C2–B4** **Samples: 19** **RAM: 1 MB** **Level 2**

Various techniques
Single hits, tremolo, rubs, and bowed
1 velocity layer
Release samples

Mapping:
C2–D2: tremolo, var. 1–2
E2–G2: rubbed with the hand, var. 1–3
C3–G3: bowed, var. 1–4
C4–F4: single hits, var. 1–4
G4–B4: metal chain, var. 1–3
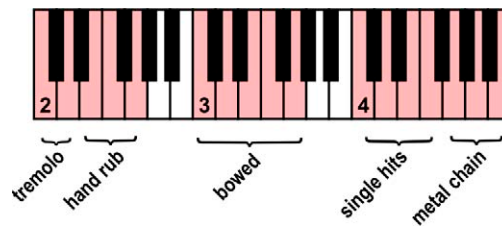
05 Thunder-Sheet_E **Range: C4–D5** **Samples: 9** **RAM: 1 MB** **Level 2**

Thundersheet with studs
Single hits, multi-hit, and shaken
1 velocity layer
Release samples

Mapping:
C4–E4: single hits, var. 1–3
G4: multi-hit
C5–D5: shaken, var. 1–2
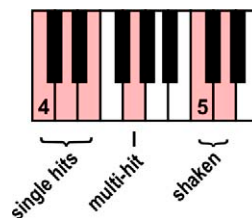
05 STEEL

Level 1: Railway rails
Single hits, tremolo normal and crescendo, 1–3 upbeats
Level 2: Brake disks, single hits
Springs, single hits, glissandos slow and fast

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01 Rails	**Range: C1–A#7**	**Samples: 147**	**RAM: 9 MB**	**Level 1**

Railway rails 1–7
Single hits (2 alternations)
Tremolo normal and crescendo
1–3 upbeats
Velocity mapping: Single hits, 3 layers
All others, 1 layer
Release samples
2 Alternations

> **Mapping:**
> C1–A#1 – rail 1
> C2–A#2 – rail 2
> C3–A#3 – rail 3
> C4–A#4 – rail 4
> C5–A#5 – rail 5
> C6–A#6 – rail 6
> C7–A#7 – rail 7
> C, D: single hits, left/right (2 alternations)
> C#, D#: tremolo normal/crescendo
> F–A#: 1–3 upbeats, var. 1/2 (2nd variants on black keys)

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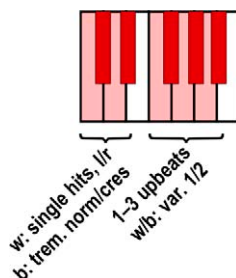
02 Brakes	**Range: C3–G6**	**Samples: 16**	**RAM: 1 MB**	**Level 2**

Set of 8 brake disks
Single hits, variations 1 and 2
1 velocity layer

> **Mapping:**
> C3–D3: Brake disk 1
> F3–G3: Brake disk 2
> C4–D4: Brake disk 3
> F4–G4: Brake disk 4
> C5–D5: Brake disk 5
> F5–G5: Brake disk 6
> C6–D6: Brake disk 7
> F6–G6: Brake disk 8
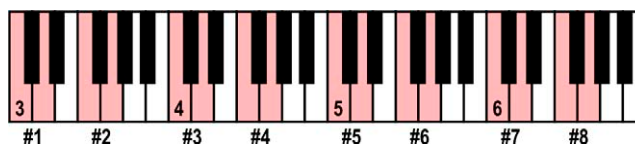
| **03 Springs** | **Range: C3–G5** | **Samples: 16** | **RAM: 1 MB** | **Level 2** |

2 springs
Single hits
Glissandos slow and fast
2 velocity layers

Mapping:
C3–D3: single strokes, spring 1 (p–f)
F3–G3: single strokes, spring 2 (p–f)
C4–D4: slow glissandos, spring 1
F4–G4: slow glissandos, spring 2
C5–D5: fast glissandos, spring 1
F5–G5: fast glissandos, spring 2

06 CASTANETS

Level 1: Single strokes
1–4 upbeats
Tremolo 1 and 8 sec.
Performance repetitions

| **01 Castanets** | **Range: C4–D6** | **Samples: 28** | **RAM: 1 MB** | **Level 1** |

Single strokes (2 alternations)
1–4 upbeats
Tremolo, 1 and 8 sec.
Performance repetitions, variations 1 and 2
1 velocity layer
Release samples
2 Alternations

Mapping:
C4–D4: single strokes, left/right
Performance repetitions, 80 BPM (8 reps., strokes alternating on lower and higher keys)
F4–G4: var. 1; A4–B4: var. 2
C5–F5: 1–4 upbeats
G5: 4 upbeats, fast
C6–D6: tremolo 8/1 sec.
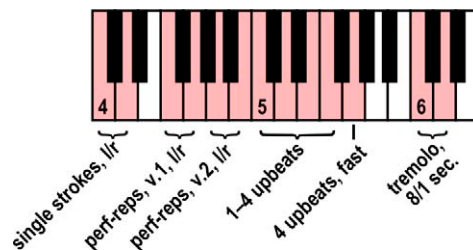
07 HONKS

Level 2: Car horns, single notes open and muted
Bicycle horns, single notes low and high, changing notes, open and muted

| 01 Car-Honks | Range: A#3–E7 | Samples: 60 | RAM: 3 MB | **Level 2** |

Car horns
Single notes, open and muted
1 velocity layer
2 Alternations

> **Mapping:**
> A#3–E5: open honks
> A#5–E7: muted honks
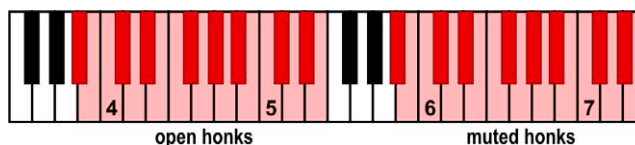
| 02 Bike-Honks | Range: C4–E5 | Samples: 10 | RAM: 1 MB | **Level 2** |

Bicycle horns
Single notes, low, high, and changing note
Open and muted
1 velocity layer
2 Alternations

> **Mapping:**
> C4: low honk, open
> E4: high honk, open
> G4: low-high honk, open
> C5: low honk, muted
> E5: high honk, muted
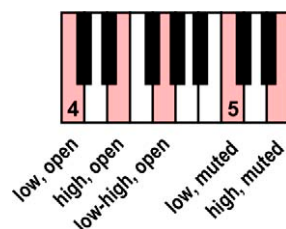
08 CHIMES

Level 2: Glass, metal, and bamboo chimes
Single strokes, slow and fast, double strokes, tinkling, damped strokes

01 Glass-Chimes	Range: C2–F5	Samples: 14	RAM: 1 MB	**Level 2**

Single strokes, slow and fast
Double strokes
Up and down
1 velocity layer

Mapping:
C2–F3 – variation 1
C4–F5 – variation 2
C–D: slow strokes, up/down
F–G: fast strokes, up/down
C'–D': double strokes, up/down
F': double crossed stroke
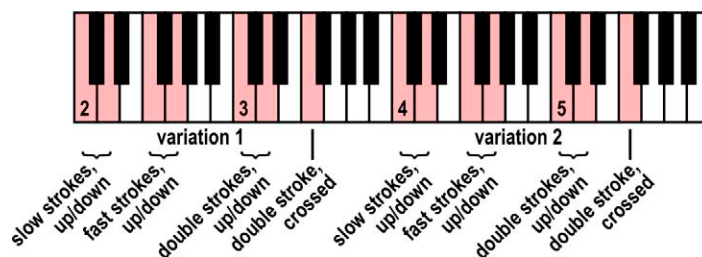
02 Metal-Chimes	Range: C4–G6	Samples: 10	RAM: 1 MB	**Level 2**

Single strokes, slow and fast, up and down
Low and high tinkling
Damped strokes
1 velocity layer

Mapping:
C4–D4: slow strokes, up/down
F4–G4: fast strokes, up/down
C5–D5: tinkling, low/high
C6–D6: damped strokes, low
F6–G6: damped strokes, high
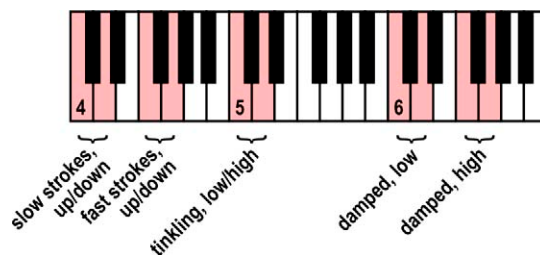
03 Bamboo-Chimes Range: C2–G6 Samples: 16 RAM: 1 MB **Level 2**

Small and large chimes
Single strokes
Tinkling
Damped strokes
1 velocity layer

Mapping:
Small chimes:
C2–D2: slow strokes, up and down
F2–G2: fast strokes, up and down
Large and small chimes:
C3–D3: combination strokes
Large chimes:
C4–D4: slow strokes, up and down
F4–G4: fast strokes, up and down
C5–D5: tinkling, low and high
C6–D6: damped hits, low
F6–G6: damped hits, high

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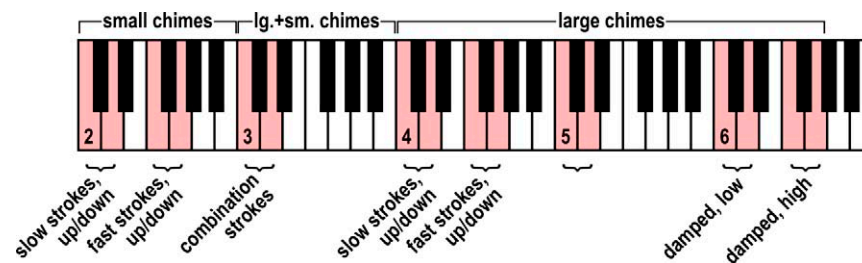
09 ANKLUNG

Level 2: Single notes
Short, medium, and long

01 Anklung_short Range: F3–D6 Samples: 30 RAM: 1 MB **Level 2**

Single notes, short
1 velocity layer

02 Anklung_medium Range: F3–D6 Samples: 30 RAM: 1 MB **Level 2**

Single notes, medium
1 velocity layer

03 Anklung_long Range: F3–D6 Samples: 30 RAM: 1 MB **Level 2**

Single notes, long
1 velocity layer

10 WATERPHONE

Level 1: Single notes, bowed
straight and modulated
Level 2: Pizzicato
Repetitions
3-note arpeggios
Effects

01 WP_basic	**Range: C3–G5**	**Samples: 11**	**RAM: 1 MB**	**Level 1**

Single notes
Bowed, straight
1 velocity layer

02 WP_basic_modulation	**Range: C3–E7**	**Samples: 20**	**RAM: 1 MB**	**Level 1**

Single notes
Bowed, modulated
The modulation of the tone is effected by tipping the instrument or moving it in circles.
1 velocity layer

> **Mapping:**
> C3–F5: Low modulations
> G5–E7: High modulations
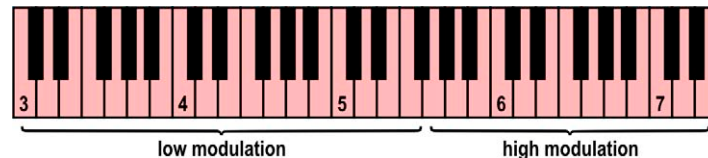
03 WP_pizz	**Range: E3–C6**	**Samples: 11**	**RAM: 1 MB**	**Level 2**

Single notes
Pizzicato
1 velocity layer

04 WP_repetition	**Range: E3–C6**	**Samples: 33**	**RAM: 2 MB**	**Level 2**

Repetitions, bowed. Each tone is repeated 8 times; due to the quick action of the bow, the water starts to move in the body and modulates the tone, which can be heard especially well in the decay phase of the samples.
1 velocity layer
Release samples
AB switch: release duration long/short

05 WP_arpeggio	**Range: E3–A5**	**Samples: 9**	**RAM: 1 MB**	**Level 2**

Arpeggios, bowed. These arpeggios each consist of three notes. The tones sound together after the strokes because of the long decay time, which creates a "singing" effect.
1 velocity layer

06 WP_FX   **Range: G1–A#7**   **Samples: 31**   **RAM: 1 MB**   **Level 2**

This Patch contains various effects that can be created with the waterphone, ranging from pizzicato tremolos to multivoice bowing with repetitions. Most of these effects have two variations, each mapped to two keys to allow for a little transposition. Some of the samples are quite long, so – hold the key!

1 velocity layer

Mapping:

G1–A#1: pizzicato, tremolo
C2–D#2: pizzicato, short glissando
F2–G#2: glissando, slow
C3–D#3: spherical sounds, bowed
G3–A#3: cluster glissando
C4–D#4: glissando, fast
F4–G#4: glissando, slow (same as above)
C5–B5: short glissando, low (7 variations)
C6–F#6: short glissando, high (4 variations)
C7–A#7: multivoice (6 variations)
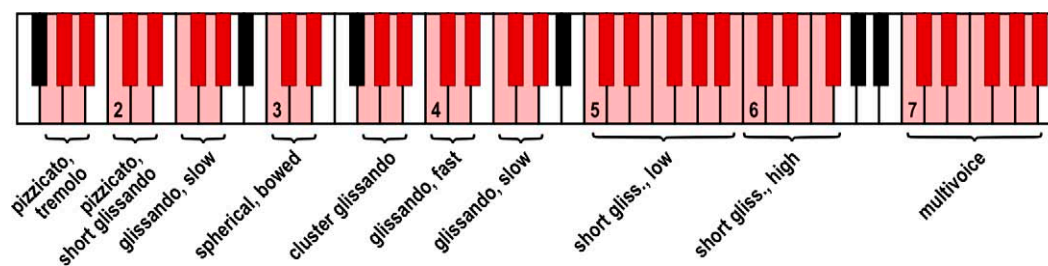
11 SHAKER

Level 2: Bamboo, chrome, and kiwi-shaped shakers
Single shakes
1–2 upbeats
Tremolo normal and dynamics, accelerando and ritardando
Performance repetitions

| **01 Shaker_Bamboo (Chrome)** | Range: C4–A#7 | Samples: 22 | RAM: 1 MB | **Level 2** |

01 Bamboo/02 Chrome Shaker
Single shakes
1–2 upbeats
Performance repetitions
Tremolo normal and dynamics, accelerando and ritardando (AB switch acc./rit.)
2 velocity layers
Release samples
AB switch: crescendo/diminuendo

Mapping:
C4, D4: single shakes, var.1/2
C#4, D#4: 1–2 upbeats
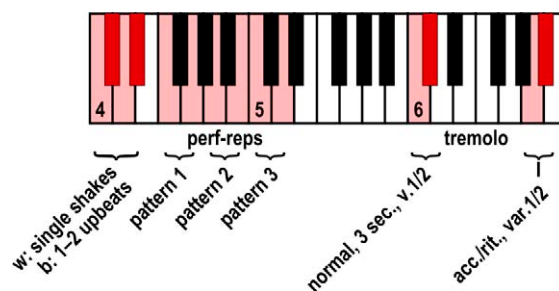Performance repetitions, 88 BPM (8 reps., strokes alternating on lower and higher key)
F4–G4: pattern 1
A4–B4: pattern 2
C5–D5: pattern 3
C6–C#6: tremolo, normal, 3 sec., var. 1/2
F6–G#6: tremolo dynamics, 1.5 and 3 sec., var. 1/2 (2nd variants on black keys)
A6–A#6: tremolo, accelerando and ritardando, var. 1/2
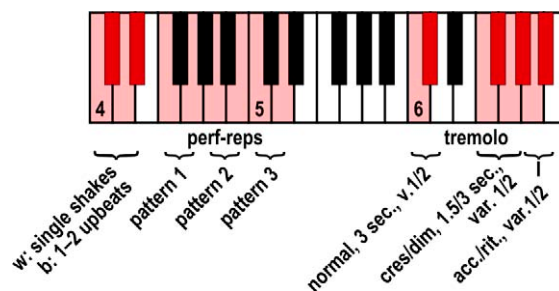
O3 Shaker_Kiwi   **Range: C4–A#7   Samples: 34   RAM: 2 MB   Level 2**

Single shakes
1–2 upbeats
Performance repetitions
Tremolo normal, accelerando and ritardando
1 velocity layer
AB switch: accelerando/ritardando

Mapping:
C4, D4: single shakes, var.1/2
C#4, D#4: 1–2 upbeats
Performance repetitions, 88 BPM (8 reps., strokes alternating on lower and higher key)
F4–G4: pattern 1
A4–B4: pattern 2
C5–D5: pattern 3
C6–C#6: tremolo, normal, 3 sec., var. 1/2
A6–A#6: tremolo, accelerando and ritardando, var. 1/2

12 CAXIXI

Level 2: Single strokes
Upbeats, slow and fast
Performance repetitions, slow and fast

Caxixi	**Range: C2–B7**	**Samples: 104**	**RAM: 6 MB**	**Level 2**

Single strokes
Slow and fast upbeats
Performance repetitions, slow and fast
1 velocity layer

Mapping:
Low caxixi:
C2: single stroke; C#2, D#2: slow/fast upbeat
Performance repetitions, p/f (8 reps., strokes alternating on lower and higher key)
F2–B2: 80 BPM, F3–B3: 120 BPM
High caxixi:
C4: single stroke; C#4: upbeat
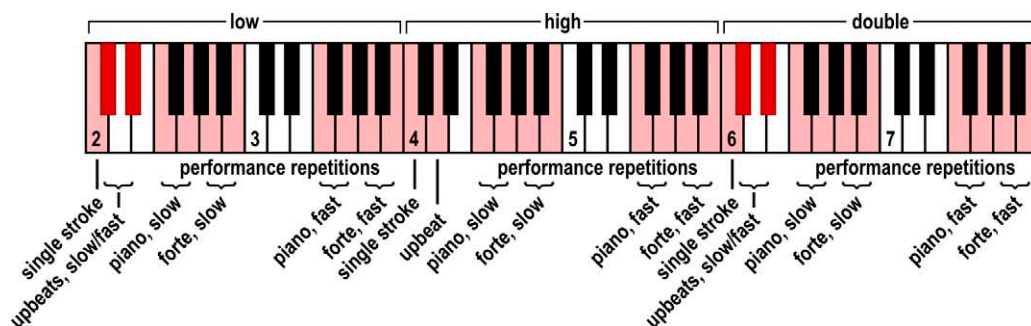Performance repetitions, p/f (8 reps., strokes alternating on lower and higher key)
F4–B4: 80 BPM, F5–B5: 120 BPM
Double caxixi:
C6: single stroke; C#6, D#6: slow/fast upbeat
Performance repetitions, p/f (8 reps., strokes alternating on lower and higher key)
F6–B6: 80 BPM, F7–B7: 120 BPM

13 GUIRO

Level 2: Wood and gourd guiros
Single strokes, short, medium, long, and accelerando
Open and muted attack
Performance repetitions

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01 Guiro_Wood (Gourd) | **Range: C3–G#6** **Samples: 108** **RAM: 6 MB** | **Level 2**

01 Wood/02 Gourd Guiro
Single strokes: Short, medium, long, and accelerating
Up and down, open and muted attack
Performance repetitions, 4 patterns (pattern 1+2: 12 repetitions; 3+4: 8 repetitions)
1 velocity layer
2 Alternations

Mapping:

C3–D#3 – short strokes, up/down, open and muted (muted on black keys)
F3–G#3 – medium strokes, up/down, open and muted (muted on black keys)
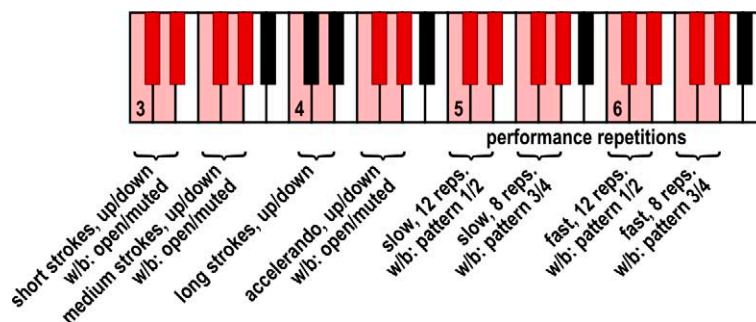C4–D4 – long strokes, up/down, open
F4–D#4 – accelerando, up/down, open and muted (muted on black keys)
Performance repetitions (alternating on two keys):
C5–G#5 – slow (67 BPM)
C6–G#6 – medium (84 BPM)
C–D: pattern 1; C#–D#: pattern 2; F–G: pattern 3; F#–G#: pattern 4

14 CLAVES

Level 2: Fiber and wood claves, low and high
Single strokes
1–3 upbeats

01 Claves	**Range: C3–A6**	**Samples: 20**	**RAM: 1 MB**	**Level 2**

Fiber and wood claves, low and high
Single strokes
1–3 upbeats
1 velocity layer

Mapping:
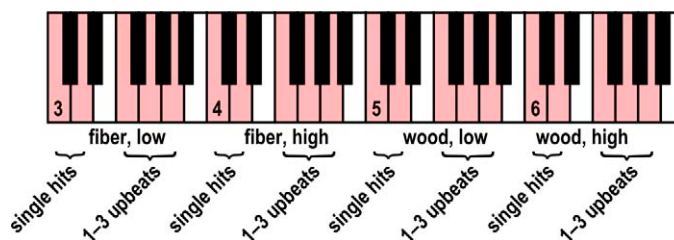C3–A3 – fiber claves, low
C4–A4 – fiber claves, high
C5–A5 – wood claves, low
C6–A6 – wood claves, high
C–D: single strokes
F–A: 1–3 upbeats

15 LOG DRUM

Level 1: Hard mallets, single hits (AB switching left/right hand variant)
Soft mallets, single hits and rolls
Level 2: Hard and wood mallets
Single hits and rolls

01 Log-Drum_Hard (Medium/Soft/Wood)	**Range: F#3–G#6**	**Samples: 24**	**RAM: 1 MB**	**Level 1**

01 Hard/02 Medium/03 Soft/04 Wood mallets
Single hits
Rolls
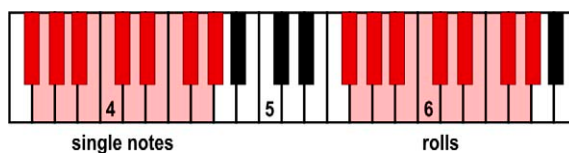Attention: Hard and soft mallets are Standard, medium and wood mallets Extended content.
3 velocity layers
2 Alternations

Mapping:
F#3–G#4: single notes
F#5–G#6: rolls

16 BOOBAMS

16 BOOBAMS/01 Stick

Level 2: Single hits
1–4 upbeats
Rebounds, fast and slow
Rolls, var. 1 and 2
Rim hits

01 Boo_Stick_Single-Hits	Range: A#2–D6	Samples: 222	RAM: 13 MB	Level 2

Wood sticks
Single hits
3 velocity layers
2 Alternations

02 Boo_Stick_UB-a1	Range: A#2–D6	Samples: 72	RAM: 4 MB	Level 2

Wood sticks
1 upbeat
2 velocity layers

03 Boo_Stick_UB-a2	Range: A#2–D6	Samples: 144	RAM: 9 MB	Level 2

Wood sticks
2 upbeats, classical and open
2 velocity layers
AB switch: closed/open

04 Boo_Stick_UB-a3	Range: A#2–D6	Samples: 144	RAM: 9 MB	Level 2

Wood sticks
3 upbeats, classical and open
2 velocity layers
AB switch: closed/open

05 Boo_Stick_UB-a4	Range: A#2–D6	Samples: 144	RAM: 9 MB	Level 2

Wood sticks
4 upbeats, classical and open
2 velocity layers
AB switch: closed/open

06 Boo_Stick_Rebounds	Range: A#2–D6	Samples: 144	RAM: 9 MB	Level 2

Wood sticks
Rebounds, fast and slow
2 velocity layers
AB switch: speed fast/slow

07 Boo_Stick_Roll	Range: A#2–D6	Samples: 222	RAM: 13 MB	Level 2

Wood sticks
Rolls, variations 1 and 2
2 velocity layers
Release samples
AB switch: variation 1/2

08 Boo_Stick_Rim	Range: A#2–D6	Samples: 37	RAM: 2 MB	**Level 2**

Wood sticks
Rim hits
1 velocity layer

16 BOOBAMS/02 Yarn Mallet	Range: A#2–D6			

Level 2: Single hits
1–4 upbeats
Rebounds, fast and slow
Rolls, var. 1 and 2

01 Boo_Yarn_Single-Hits		Samples: 222	RAM: 13 MB	**Level 2**

Yarn mallets
Single hits
3 velocity layers
2 Alternations

02 Boo_Yarn_UB-a1		Samples: 72	RAM: 4 MB	**Level 2**

Yarn mallets
1 upbeat
2 velocity layers

03 Boo_Yarn_UB-a2		Samples: 72	RAM: 4 MB	**Level 2**

Yarn mallets
2 upbeats
2 velocity layers

04 Boo_Yarn_UB-a3		Samples: 72	RAM: 4 MB	**Level 2**

Yarn mallets
3 upbeats
2 velocity layers

05 Boo_Yarn_UB-a4		Samples: 72	RAM: 4 MB	**Level 2**

Yarn mallets
4 upbeats
2 velocity layers

06 Boo_Yarn_Rebounds	Range: C3–B5	Samples: 144	RAM: 9 MB	**Level 2**

Yarn mallets
Rebounds, fast and slow
2 velocity layers
AB switch: speed fast/slow

07 Boo_Yarn_Roll		Samples: 148	RAM: 9 MB	**Level 2**

Yarn mallets
Rolls
2 velocity layers
Release samples

17 JINGLE RING

Level 2: Jingle rings A, B, C
Single strokes
Performance repetitions
Tremolo normal and dynamics

| **01 Jingle-Ring_A (B/C)** | **Range: C4–F7** | **Samples: 84** | **RAM: 5 MB** | **Level 2** |

Jingle Rings A/B/C
Single strokes
Rolls
Performance repetitions, pattern 1 (8 repetitions) and 2 (16 repetitions)
Tremolo normal and dynamics
1 velocity layer
AB switch: crescendo/diminuendo

> **Mapping:**
> C4–D#4: single strokes, normal/without attack (w/o attack on black keys)
> F4–G4: rolls, var. 1/2
> Performance repetitions, pattern 1 (8 reps., strokes alternating on lower and higher key):
> C5–D5: 80 BPM; F5–G5: 100 BPM; A5–B5: 120 BPM
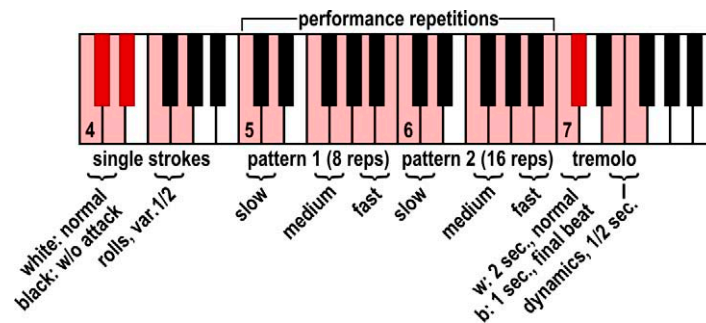> Performance repetitions, pattern 2 (16 reps., strokes alternating on lower and higher key):
> C6–D6: 80 BPM; F6–G6: 100 BPM; A6–B6: 120 BPM
> Tremolo:
> C7: normal, 2 sec.
> C#7: 1 sec., with final beat
> E7–F7: dynamics, 1 and 2 sec.

50 MISC PERCUSSION

50 MISC PERCUSSION/01 Windmachine

Level 1: Sound variations 1–7

01 Windmachine	**Range: C4–B4**	**Samples: 7**	**RAM: 1 MB**	**Level 1**

7 sound variations
1 velocity layer

50 MISC PERCUSSION/02 Rainmaker

Level 2: Rainmakers 1–3
Slow, fast, shaken

01 Rainmaker	**Range: C3–B6**	**Samples: 15**	**RAM: 1 MB**	**Level 2**

Slow, fast, and shaking sounds from three rainmakers. Rainmaker 3 also has 2 patterns at different speeds.
1 velocity layer

Mapping:
Rainmaker 1:
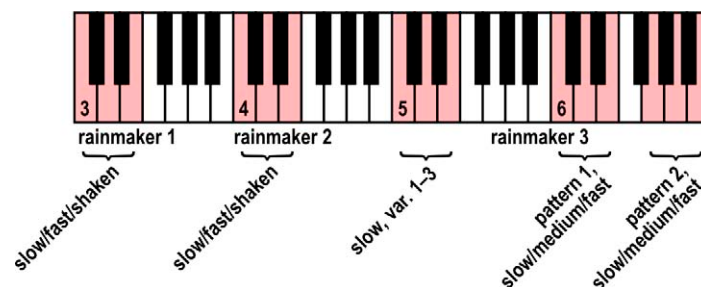C3–E3: slow, fast, shaken
Rainmaker 2:
C4–E4: slow, fast, shaken
Rainmaker 3
C5–E5: slow, var. 1–3
C6–E6: pattern 1, BPM 90, 104, 134
G6–B6: pattern 2, BPM 86, 96, 126

50 MISC PERCUSSION/03 Ocean-Drums

Level 2: Ocean drum A and B
Short, long, and motion sounds
Accents
Full samples and excerpts

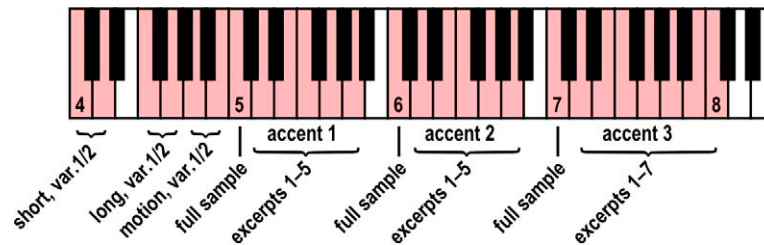| **01 Ocean_drum-A**	**Range: C4–C8**	**Samples: 26**	**RAM: 1 MB**	**Level 2**

Short and long sounds
Motion sounds
Accents, 3 sets with full samples and excerpts
1 velocity layer

Mapping:
C4–D4: short sounds
F4–G4: long sounds
A4–B4: motion sounds
Accent 1:
C5: full sample
D5–A5: excerpts 1–5
Accent 2:
C6: full sample
D5–A5: excerpts 1–5
Accent 3:
C7: full sample
D7–C8: excerpts 1–7

02 Ocean_drum-B **Range: C3–B6** **Samples: 22** **RAM: 1 MB** **Level 2**

Slow short and long sounds
Motion sounds
Accents, 3 sets with full samples and excerpts
1 velocity layer

Mapping:
C4–D4: slow, short, var. 1/2
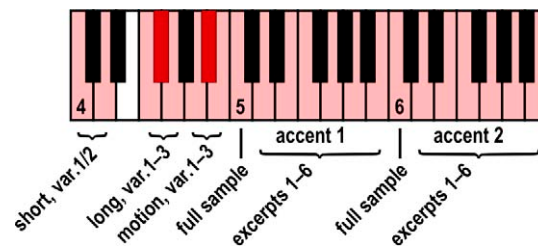F4–G4: slow, long, var. 1–3
A4–B4: motion sounds, var. 1–3
Accent 1:
C5: full sample
D5–B5: excerpts 1–6
Accent 2:
C6: full sample
D6–B6: excerpts 1–6

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50 MISC PERCUSSION/04 Gun shots

Level 2: 6mm pistol, 6/9 mm revolver
Shots, wet and dry

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01 Shots **Range: C2–C5** **Samples: 14** **RAM: 1 MB** **Level 2**

6mm pistol, 6 and 9 mm revolvers
Single and double shots
Wet and dry variations
1 velocity layer

Mapping:
Pistol, 6mm:
C2–F2: single shots, wet (with reverb)
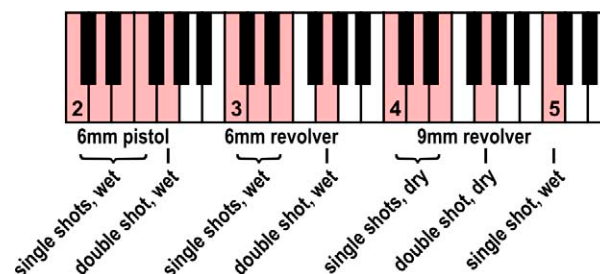G2: double shot, wet
Revolver, 6mm:
C3–E3: single shots, wet
G3: double shot, wet
Revolver, 9mm:
C4–E4: single shots, dry (no reverb)
G4: double shot, dry
C5: single shot, wet

50 MISC PERCUSSION/05 Whip

Level 2: 2 whips
2 sound variations

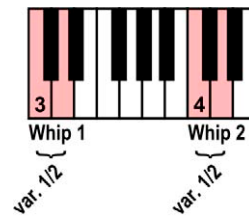| **01 Whip**	**Range: C3–D4**	**Samples: 8**	**RAM: 1 MB**	**Level 2**

2 whips with 2 sound variations each
2 velocity layers

> **Mapping:**
> C3–D3: Whip 1, var. 1/2
> C4–D4: Whip 2, var. 1/2

50 MISC PERCUSSION/06 Hammer

Level 2: Hammer beats
Various surfaces

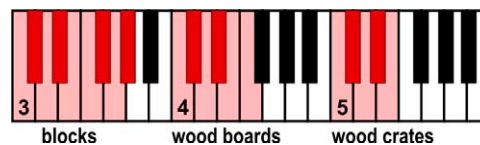| **01 Hammer**	**Range: C3–E5**	**Samples: 20**	**RAM: 1 MB**	**Level 2**

Hammer beats on wood blocks, boards, and crates
1 velocity layer

> **Mapping:**
> C3–G#3: blocks
> C4–F4: wood boards
> C5–E5: wood crates

50 MISC PERCUSSION/07 Ratchet

Level 2: Ratchets 1–5
Staccato, short, medium, long tones

01 Ratchets	**Range: C2–F6**	**Samples: 25**	**RAM: 1 MB**	**Level 2**

Ratchets 1–5
Staccato
Short, medium, and long tones (with release samples)
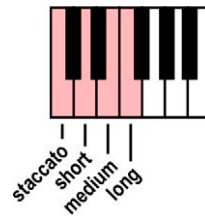1 velocity layer
Release samples

Mapping:
Ratchet 1: C2–F2; Ratchet 2: C3–F3; Ratchet 3: C4–F4; Ratchet 4: C5–F5; Ratchet 5: C6–F6
C: staccato
D: short tone
E: medium tone
F: long tone

50 MISC PERCUSSION/08 Sirens

Level 2: Sirens 1–3
Dry and wet tones

01 Sirens	**Range: C2–G5**	**Samples: 18**	**RAM: 1 MB**	**Level 2**

Siren 1: 3 dry and 3 wet tones
Siren 2: 7 dry tones
Siren 3: 5 dry tones
Various durations
1 velocity layer

Mapping:
Siren 1:
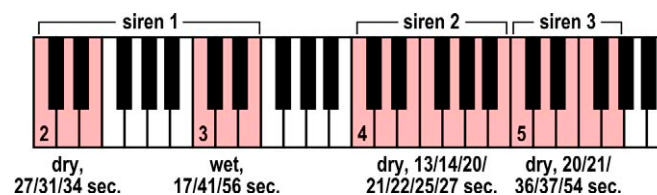C2–E2: dry, 27, 31, 45 sec.
C3–E3: wet, 17, 41, 56 sec.
Siren 2:
C4–B4: dry, 13, 14, 20, 21, 22, 25, 27 sec.
Siren 3:
C5–G5: dry, 20, 21, 36, 37, 54 sec.

50 MISC PERCUSSION/09 Bull roarer

Level 2: 6 bullroarer sounds

01 Bull_roarer	Range: C2–B7	Samples: 39	RAM: 2 MB	**Level 2**

6 bullroarer sounds
Full samples with 3 to 8 excerpts each
1 velocity layer

Mapping:
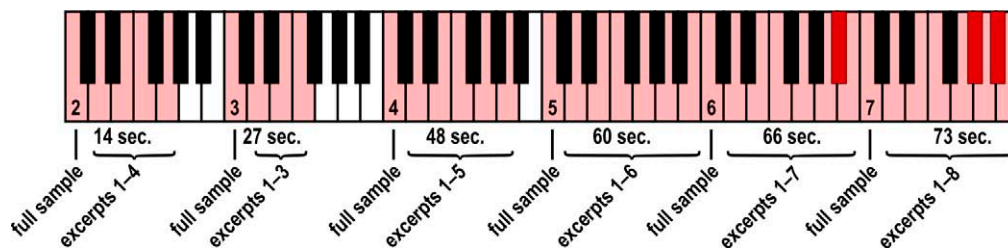14 sec. – C2: full sample; D2–G2: excerpts 1–4
27 sec. – C3: full sample; D3–F3: excerpts 1–3
48 sec. – C4: full sample; D4–A4: excerpts 1–5
60 sec. – C5: full sample; D5–B5: excerpts 1–6
66 sec. – C6: full sample; D6–A6, A#6, B6: excerpts 1–7
73 sec. – C7: full sample; D7–B7: excerpts 1–8 (samples on G#7 and A#7)

50 MISC PERCUSSION/10 Spring drum

Level 1: 2 spring drums
Various techniques

Spr-Drum   Range: C2–F#6   Samples: 35   RAM: 2 MB   **Level 1**

2 spring drums
Pizzicato, finger slides and snips, rotation, and pulses
1 velocity layer

Mapping:
Spring Drum 1:
C2–D2: pizzicato, p–mf–ff
D#2: finger snip
E2–F2: finger slide, slow and fast
A2–B2: rotation, p, f, and stereo
E3–F3: pulse, single strokes
F#3–A3: pulse, slow, medium, and fast 1–2

Spring Drum 2:
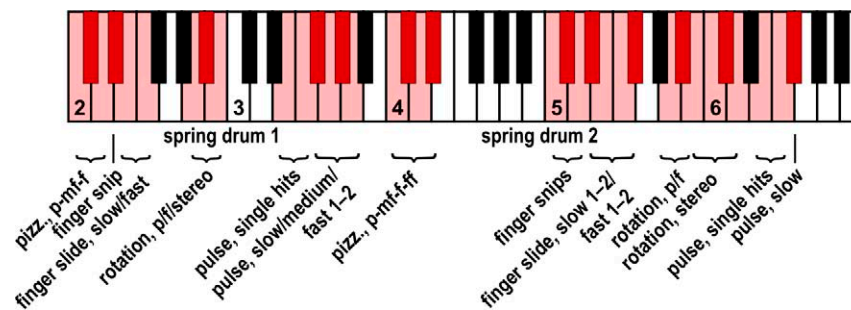C4–D#4: pizzicato, p–mf–f–ff
C5–D5: finger snips
D#5–F#5: finger slide, slow 1–2 and fast 1–2
A5–A#5: rotation, p and f
B5–D6: stereo rotation 1–4
E6–F6: pulse, single strokes
F#6: slow pulse

50 MISC PERCUSSION/11 Vibratone

Level 2: Low and high vibratone
Single strokes
Pitch changes
Tremolo accelerando and ritardando

Vibratone_1 (2)	**Range: C4–E5**	**Samples: 10**	**RAM: 1 MB**	**Level 2**

Low/high Vibratone
Single strokes
1–4 Pitch changes
Tremolo accelerando and ritardando
1 velocity layer

Mapping:
C4: no pitch change
D4–E4: single pitch change, up/down
F4–G4: double pitch change, up/down
A4: fast double pitch change
B4: fourfold pitch change
C5: tremolo, normal
D5–E5: tremolo, accelerando/ritardando
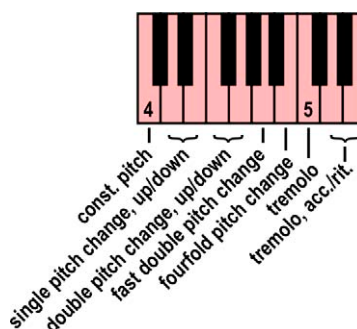
50 MISC PERCUSSION/12 Flexatone

Level 2: Flexatone A and B
Static tones
Glissandos up and down, 2 and 4 sec.
Effects

01 Flexatone-A_static	**Range: G#2–C6**	**Samples: 14**	**RAM: 1 MB**	**Level 2**

Static tones, 2 and 4 sec. tone length
1 velocity layer

Mapping:
G#2–C4: 4 sec. tones
G#4–C6: 2 sec. tones

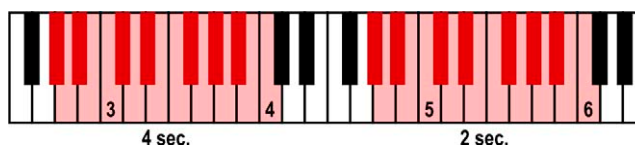**02 Flexatone-A_glissandi**   Range: C2–A6   Samples: 24   RAM: 1 MB   **Level 2**

Glissandos, up and down
2 and 4 sec.
Various intervals and starting notes
1 velocity layer

Mapping:
Up, 2 sec.:
C2–E2: D5, minor 3rd; A2: E5, dim. 5th; B2: F5, 4th
G2: A#4, major 3rd, dim. 5th, octave
Up, 4 sec.:
C3–E3: A#4, major 3rd, dim. 5th, octave
F3: D5, minor 3rd; G3: E5, dim. 5th; A3: F5, 4th
Down, 2 sec.:
C5–E5: A#5, minor 3rd, dim. 5th, octave
F5: D#5, 4th; G5: E5, dim. 5th; A5: G5, major 3rd
Down, 4 sec.:
C6–E6: A#5, minor 3rd, dim. 5th, octave
G6: D#5, 4th; A6: E5, dim. 5th; B6: G5, major 3rd
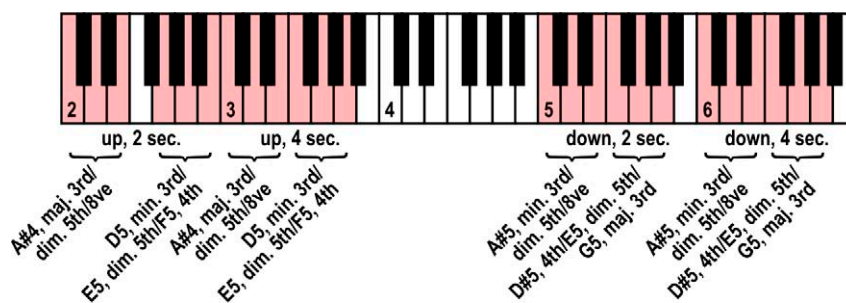
03 Flexatone-A_FX   Range: C4–B5   Samples: 12   RAM: 1 MB   **Level 2**

2 sets of effects
Full samples with 4 and 6 excerpts
1 velocity layer

Mapping:
Set 1:
C4: full sample
D4–G4: excerpts 1–4
Set 2:
C5: full sample
D5–B5: excerpts 1–6

04 Flexatone-B_glissandi   Range: C3–G4   Samples: 8   RAM: 1 MB   **Level 2**

Glissandos, up and down
2 and 4 sec.
Various intervals and starting notes
1 velocity layer

Mapping:
Up, 2 sec.:
C3: E5, 5th; D3: B5, 4th
Up, 4 sec.:
F3: E5, 5th; G3: B5, 4th
Down, 2 sec.:
C4: B5, 5th; D4: E6, 4th
Down, 4 sec.:
F4: B5, 5th; G4: E6, 4th

05 Flexatone-B_FX   Range: C3–A4   Samples: 11   RAM: 1 MB   **Level 2**

2 sets of effects
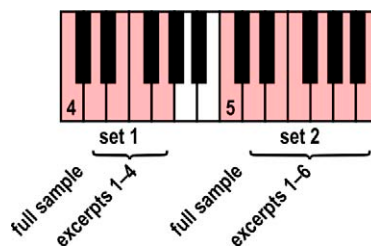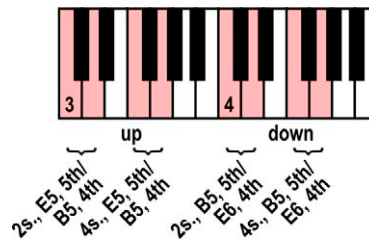Full samples with 4 and 5 excerpts
1 velocity layer

Mapping:
Set 1:
C3: full sample
D3–G3: excerpts 1–4
Set 2:
C4: full sample
D4–A4: excerpts 1–5
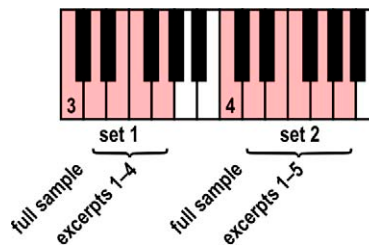
50 MISC PERCUSSION/13 Cuica

Level 2: Cuica 1–3
Short, medium, and long tones
Effect sounds

Cuica_1   **Range: C2–D6**   **Samples: 18**   **RAM: 1 MB**   **Level 2**

Short, medium, and long tones, piano and forte
2 effect sounds
1 velocity layer

Mapping:
C2–D2: short tones, piano
F2–A2: medium tones, piano
C3–F3: long tones, piano
C4–D4: short tones, forte
F4–A4: medium tones, forte
C5–D5: long tones, forte
C6–D6: effect sounds

Cuica_2   **Range: C2–D6**   **Samples: 13**   **RAM: 1 MB**   **Level 2**

Short, medium, and long tones, piano and forte
2 effect sounds
1 velocity layer

Mapping:
C2–D2: short notes, piano
C3–E3: long notes, piano
C4–E4: short notes, forte
C5–E5: medium notes, forte
C6–D6: effect sounds
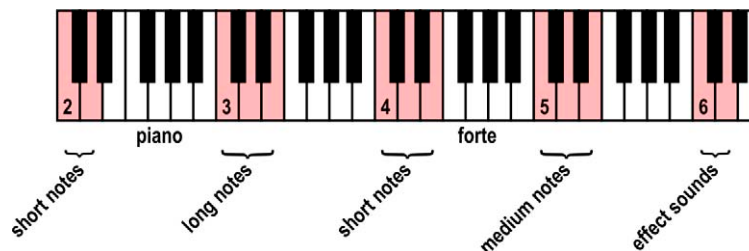
Cuica_3   Range: C2–F6   Samples: 17   RAM: 1 MB   Level 2

Short, medium, and long tones, piano and forte
2 effect sounds
1 special sound
1 velocity layer

Mapping:
C2–F2: short notes, piano
C3–E3: medium notes, piano
C4–F4: short notes, forte
C5–E5: medium notes, forte
C6–D6: effect sounds
F6: special

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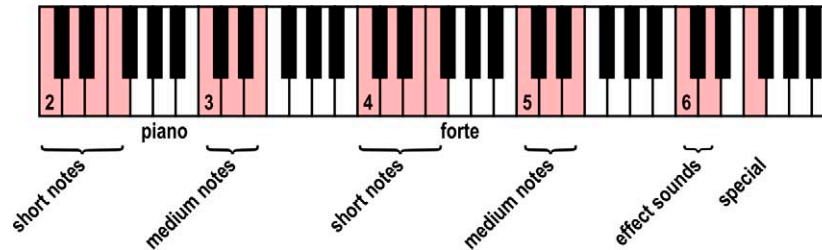
50 MISC PERCUSSION/14 Waldteufel

Level 2: Small and large waldteufel
Short, medium, long, and extra-long sounds

Waldteufel   Range: C3–D5   Samples: 14   RAM: 1 MB   Level 2

Small and large waldteufel
Short, medium, long, and extra-long sounds
1 velocity layer

Mapping:
Small waldteufel:
C3–D3: short
F3–G3: medium
A3–B3: long
Large waldteufel:
C4–D4: short
F4–G4: medium
A4–B4: long
C5–D5: extra long
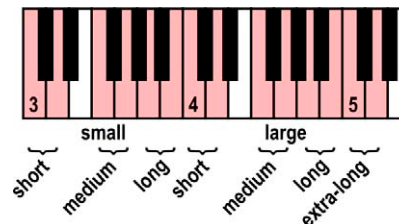
50 MISC PERCUSSION/15 Lion roar

Level 2: Short, medium, and long variations
Tremolos

Lion_roar	**Range: C3–G5**	**Samples: 14**	**RAM: 1 MB**	**Level 2**

Short, medium, and long tones with variations
Tremolos
1 velocity layer

Mapping:
C3: short tone
D3: medium tone
E3–G3: long tones
C4: variation, short tone
D4: variation, medium tone
E4–F4: variations, long tones
C5–G5: tremolos
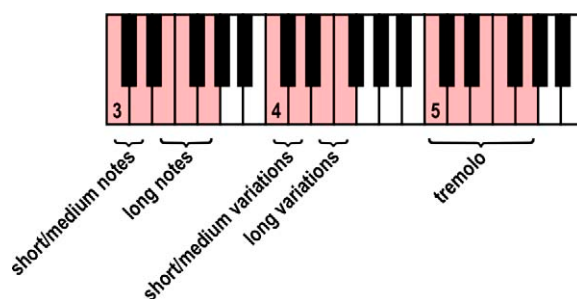
Matrices

Matrix - LEVEL 1

L1 01 Triangle-A
Samples: 128 **RAM: 8 MB** **Level 1**

Patch:
01 Tri-A

L1 02 Crotales
Samples: 60 **RAM: 3 MB** **Level 1**

Patch:
01 Crotales_Metal

L1 03 Thundersheet
Samples: 21 **RAM: 1 MB** **Level 1**

Patch:
01 Thunder-Sheet_A

L1 04 Rails
Samples: 147 **RAM: 9 MB** **Level 1**

Patch:
01 Rails

L1 05 Castanets
Samples: 28 **RAM: 1 MB** **Level 1**

Patch:
01 Castanets

L1 06 Waterphone
Samples: 31 **RAM: 1 MB** **Level 1**

Patches:
01 WP_basic
02 WP_basic_modulation

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	01 WP_basic
V2	02 WP_basic_modulation

L1 07 Log drum
Samples: 72 **RAM: 4 MB** **Level 1**

Patches:
01 Log-Drum_Hard
03 Log-Drum_Soft

Matrix switches: Vertical: Modwheel, 2 zones

	H1
V1	01 Log-Drum_Hard
V2	03 Log-Drum_Soft

L1 08 Misc percussion
Samples: 95 **RAM: 5 MB** **Level 1**

Miscellaneous percussion
Wind machine, whip, hammer, ratchets, and spring drum

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	01 Windmachine	01 Whip	01 Hammer	01 Ratchets	Spr-Drum

Matrix - LEVEL 2

01 Triangle-A   Samples: 146   RAM: 9 MB   Level 2

Patches:
01 Tri-A
02 Tri-A_perf-rep_dyn9

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Tri-A	02 Tri-A_perf-rep_dyn9

02 Triangle-B   Samples: 146   RAM: 9 MB   Level 2

Patches:
03 Tri-B
04 Tri-B_perf-rep_dyn9

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	03 Tri-B	04 Tri-B_perf-rep_dyn9

03 Crotales   Samples: 150   RAM: 9 MB   Level 2

Patches:
01 Crotales_Metal
02 Crotales_Tri
03 Crotales_Bow

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Crotales_Metal	02 Crotales_Tri	03 Crotales_Bow

04 Japanese Singing Bowls   Samples: 39   RAM: 2 MB   Level 2

Patches:
01 J-Bowls_Wood
02 J-Bowls_Rubber
03 J-Bowls_Secco

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 J-Bowls_Wood	02 J-Bowls_Rubber	03 J-Bowls_Secco

05 Thundersheets   Samples: 90   RAM: 5 MB   Level 2

Thundersheets A–E

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	thundersheet A	thundersheet B	thundersheet C	thundersheet D	thundersheet E

06 Steel   **Samples: 179**   **RAM: 11 MB**   **Level 2**

Patches:
01 Rails
02 Brakes
03 Springs

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Rails	02 Brakes	03 Springs

07 Castanets   **Samples: 28**   **RAM: 1 MB**   **Level 2**

Patch:
01 Castanets

08 Honks   **Samples: 70**   **RAM: 4 MB**   **Level 2**

Patches:
01 Car-Honks
02 Bike-Honks

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Car-Honks	02 Bike-Honks

09 Chimes   **Samples: 40**   **RAM: 2 MB**   **Level 2**

Patches:
01 Glass-Chimes
02 Metal-Chimes
03 Bamboo-Chimes

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Glass-Chimes	02 Metal-Chimes	03 Bamboo-Chimes

10 Angklung   **Samples: 90**   **RAM: 5 MB**   **Level 2**

Patches:
01 Anklung_short
02 Anklung_medium
03 Anklung_long

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Anklung_short	02 Anklung_medium	03 Anklung_long

11 Waterphone   **Samples: 115   RAM: 7 MB**   **Level 2**

Sounds normal and modulated
Pizzicato
Repetitions
Arpeggio
Effects

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
V1	01 WP_basic	03 WP_pizz	04 WP_repetition	05 WP_arpeggio	06 WP_FX
V2	02 WP_basic_modulation	03 WP_pizz	04 WP_repetition	05 WP_arpeggio	06 WP_FX

12 Rhythm Percussion   **Samples: 588   RAM: 36 MB**   **Level 2**

Bamboo and kiwi shakers
Caxixi
Wood and gourd guiros
Jingle rings A and B
Claves

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
V1	01 Shaker_Bamboo	Caxixi	01 Guiro_Wood	01 Jingle-Ring_A	01 Claves
V1	03 Shaker_Kiwi	Caxixi	01 Guiro_Gourd	02 Jingle-Ring_B	01 Claves

13 Log drums   **Samples: 168   RAM: 10 MB**   **Level 2**

Wood, hard, medium, and soft mallets

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	wood mallets	hard mallets	medium mallets	soft mallets

14 Boobams stick   **Samples: 1055 RAM: 65 MB**   **Level 2**

Wood stick
Single hits, rim hits, rolls, rebounds, 1–4 upbeats

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single hits	rolls	1 upbeat	3 upbeats
V2	rim hits	rebounds	2 upbeats	4 upbeats

15 Boobams yarn   **Samples: 728   RAM: 45 MB**   **Level 2**

Yarn-wound mallets
Single hits, rolls, rebounds, 1–4 upbeats

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	single hits	rolls	1 upbeat	3 upbeats
V2	single hits	rebounds	2 upbeats	4 upbeats

16 Misc Percussion   **Samples: 146   RAM: 9 MB**   **Level 2**

Miscellaneous percussion

Wind machine, shots, hammer, sirens, rainmaker, whip, ratchets, and bullroarer

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	wind machine	shots	hammer	sirens
V2	rainmaker	whip	ratchets	bullroarer

Presets

Add-Perc VSL Preset Level 1   **Samples: 582   RAM: 36 MB**   **Level 1**

Matrices:

L1 01 Triangle-A

L1 02 Crotales

L1 03 Thundersheet

L1 04 Rails

L1 05 Castanets

L1 06 Waterphone

L1 07 Log drum

L1 08 Misc percussion

Keyswitches: F1–C2

Add-Perc VSL Preset Level 2   **Samples: 2659 RAM: 166 MB**   **Level 2**

Matrices:

01 Triangle-A

02 Crotales

04 Japanese Singing Bowls

05 Thundersheets

06 Steel

07 Castanets

08 Honks

12 Rhythm Percussion

13 Log drums

14 Boobams stick

16 Misc Percussion

Keyswitches: F1–D#2